

Making Smart Data Happen

A Startup Coalition x TBI Project

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STARTUP
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About Startup Coalition

Startup Coalition, formerly the Coalition for a Digital Economy (Coadec), is an independent advocacy group that serves as the policy voice for Britain's technology-led startups and scaleups. Startup Coalition was founded in 2010 by Mike Butcher, Editor-at-Large of technology news publisher TechCrunch, and Jeff Lynn, Chairman and Co-Founder of online investment platform Seedrs. Startup Coalition works across a broad range of policy areas that matter the most to startups and scaleups: Access to Talent, Access to Finance & Regulation.

About the Tony Blair Institute for Global Change

The Tony Blair Institute for Global Change (TBI) works with political leaders around the world to drive change. It is a not-for-profit organisation that provides expert advice on strategy, policy and delivery, unlocking the power of technology across all three. Its mission is to support leaders to build more open, inclusive and prosperous countries for people everywhere. TBI provides expertise in several sectors, including health care, agriculture transformation, climate and energy policy, and economic development, and works with a wide range of partners, including governments, bilateral and multilateral institutions, private corporations, academic institutions, foundations, and philanthropists who share its commitment and ambition.

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Executive Summary

The UK is on the cusp of introducing a data revolution, one which will put consumers back in control of their finances, reduce energy bills and speed up house-buying.

This “Smart Data” revolution will arrive with the passage of the Data (Use and Access) Bill (the “Data Bill”), which will likely become law before the Spring of 2025. Under this Bill, UK policymakers will finally have the power to put consumers back in control of their data. But having that power and using it are two different things. This report calls on the Government to work in the very way that the Prime Minister promised and be mission led, unconstrained by Departmental borders. If the mission of this Government is growth, smart data can help unlock it if all Ministers take the potential seriously.

Today, Smart Data only exists through Open Banking, which is used by 11 million UK consumers, but the Bill will equip rulemakers to apply it to other parts of the economy through sectoral “schemes”. This will make data sharing more secure, efficient, and cheaper – fuelling growth and empowering individuals and businesses like never before.

As yet, however, it is unclear how these new Smart Data powers will be used. This report is a call to arms to actually make Smart Data happen, focusing on three key sectors—finance, energy, and property.

Firstly, building on the success of Open Banking, Open Finance must be expedited. By expanding data sharing to savings, investments, pensions, and mortgages, we can enhance financial inclusion, transparency, and innovation. Secondly, Open Energy must unlock smart meter and energy usage data to support net-zero goals, reduce costs for households, and foster sustainable energy practices. Thirdly the Ministry for Housing, Communities and Local Government should lay the foundations for transforming the house-buying process through an Open Property scheme.

It’s critical that Smart Data has the individual at its heart, and therefore we need cross-sector governance and a vision that Smart Data can support innovation across the economy, delivering on the Government’s missions.

Finally, Smart Data can grease the wheels of public services, bringing Government into the 21st century by accelerating digitalisation of antiquated processes. Perhaps one of the most impactful use cases that will be enriched is digital identity, and we must ensure parity of basic functionality between public and private sector ID wallets for the sharing of these credentials between users of Smart Data schemes.

Done right, Smart data is a £27bn opportunity. This report sets out the first steps to make this happen.

Building a Smart Data Economy

What is Smart Data?

Smart Data means all sorts of things to all sorts of people, which can be unhelpful. For the purposes of this report, however, it refers to a new concept that will be introduced once the Data Use and Access Bill becomes law in 2025. This concept involves two types of action, which we call “Smart Data”.

The first type of Smart Data is “the secure sharing of customer data with Authorised Third Parties, upon a customer’s request” in real-time.¹ In practice, this involves an individual or representative of a business providing their explicit consent that a third party can access their data for specified reasons and duration. Smart Data of this kind gives individuals and businesses control to share their real-time data and harness it for practical needs. Without Smart Data, customers’ data is trapped with heritage service providers, limited to what they are willing to offer. But with Smart Data, consumers will be able to better choose if, when, and how they share their data and opt into services that prioritise convenience and unique personalisation. This is how Open Banking works today, with data being communicated between different providers with customer direction.

The second type of Smart Data is the secure sharing of non-personalised data sets with Authorised Third Parties in real-time. In this way, Smart Data could be used to mandate that certain actors must enable third parties to access datasets – potentially forcing them to digitalise, standardise, and then make available datasets that were previously locked away.

The creation of Smart Data is set out in Part One of the Data (Use and Access) Bill (DUA), which is currently working its way through parliament. Part One of the Bill creates a framework for how customer and business data is accessed, shared and used.² Smart Data has cross-party support, and would have already been introduced but for the General Election in 2024, which came before the Data Protection and Digital Information Bill – DUA’s spiritual predecessor – could become law.

Passing the DUA is the first necessary step in making Smart Data a reality. The DUA will not, however, bring Smart Data to life on its own. Instead, the Bill requires a secondary action via statutory instruments. The Bill lays the foundations for the introduction of specific Smart Data “schemes”, which can be introduced by policymakers in individual sectors and would set out requirements for as-yet-unspecified participants to make as-yet-unspecified datasets available, under certain conditions, all to be detailed in sectoral statutory instruments. Whether policymakers will execute the secondary action of bringing Smart Data to life through statutory instruments remains to be confirmed. The risk is that by failing to act, the government may undermine its ambitions for economic growth simply through a lack of upfront understanding of where Smart Data can deliver value.

This report is a call to arms to crack on with bringing Smart Data to life in three specific sectors: finance, energy and property.

¹

<https://assets.publishing.service.gov.uk/media/64bfea5290b545000d3e82bd/smart-data-phase-3-smart-data-implementation-guide-july-2023.pdf>

² <https://bills.parliament.uk/publications/56527/documents/5211>

Why is Smart Data Critical to Innovation?

Consumer data is disparate and underused, often guarded by incumbents like dragons hoarding treasure in caves. There is little incentive for large incumbents to proactively enable consumers to share their data in real-time, and the Right to Data Portability under Article 20 of GDPR stipulates that firms have up to 30 days to present the data in a machine-readable format – almost an eternity in data terms.³ A spreadsheet 30 days after initiation is not useful to anyone, and there is technology available today that means this can, and should, be done far quicker and more efficiently.

Introducing Smart Data across the economy would provide the UK with three core benefits:

- **Increased Competition in Markets:** Smart Data decouples services and data — to unlock new routes to market and ways to compete with sector incumbents.
- **More Benefits Consumers Can Opt Into:** Smart Data creates value for consumers — allowing them to access the best, most personalised services possible and minimising lock-in.
- **Innovation and Economic Growth:** Smart Data drives the digital economy — creating the backbone for economy-wide innovation and expansion.

There is demand for Smart Data.

All across the UK, users are already using Smart Data enabled apps and services. The most mature demonstration of the demand and opportunity presented by Smart Data is Open Banking.

Case Study: Open Banking

Open Banking was introduced under the CMA's Retail Banking Competition Order in 2017 and through the Payment Services Regulations in 2017, with the former enforced from 2018 and the latter in 2019.

Thanks to these regulations, customers now have the right to ask third-party providers to make their payments or access their financial data. The UK set up the Open Banking Implementation Entity (OBIE) to implement the CMA's Order — which included the creation of the Open Banking Standard and related guidelines.

Open Banking apps and services include the aggregation of financial services data from multiple places into one app, enhanced credit risk decision with more accurate affordability assessments, and automated savings. Open Banking has delivered clear benefits for over 11 million UK consumers and countless innovators developing solutions. Its introduction spurred the creation of a fintech sector valued at more than £4bn by investors, with 92% of the private investment raised by the sector occurring after the introduction of regulation.

While Open Banking is the only form of regulated Smart Data, the ability for consumers and businesses to exercise their right to share their data exists today across many products, usually through a widespread practice called “screen-scraping”. In simple terms, this involves a user sharing their login

³ <https://gdpr-info.eu/art-20-gdpr/>

credentials with a third party. This third party then logs in to a user’s account, copies the available information, and pastes it into their own app.

This type of quasi-Smart Data has existed for decades, and has enabled use cases today in the energy and property sectors. However, the disparity between the success of startups in these sectors and those in Open Banking is stark, illustrating the importance of Open Banking-style interoperability to a sector’s growth. Take, for example, the number of startups, shown in Figure 1. Digitalisation and tech upgrades have led to a rise in firms across all three sectors recently but the big shift happened in 2014 – when suddenly the number of new Open Banking and Open Finance firms shot up.

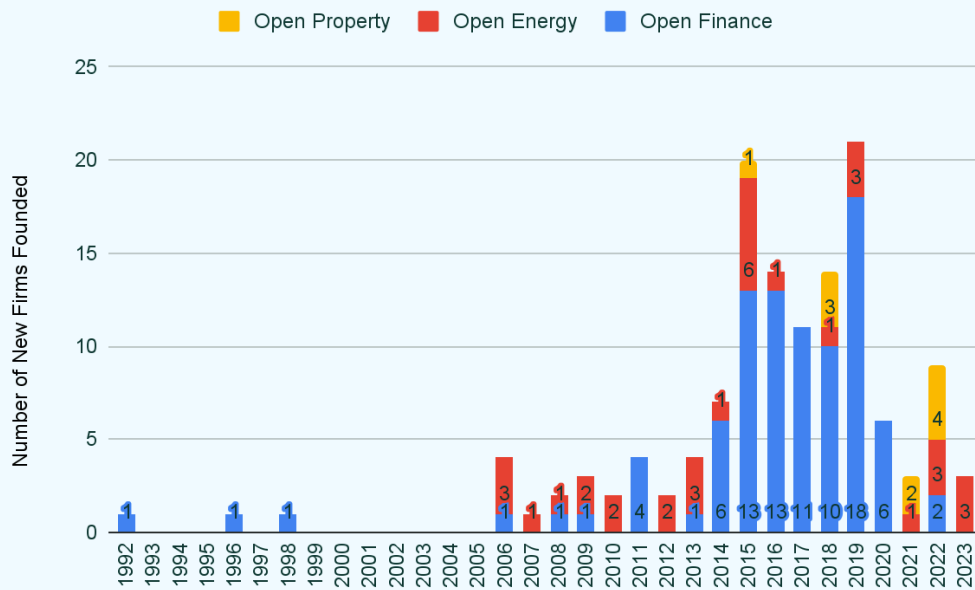


Figure 1

An even more dramatic contrast in fortunes can be seen in Figure 2, which shows investment secured by startups in these sectors.



Figure 2

The difference is dramatic. Annual investment in Open Banking/Finance firms peaked at £836m in 2022. Annual investment in Open Energy startups has never exceeded £16m, and Open Property peaked at £22m in 2024. After 2022, investment in Open Banking/Finance has trailed off. The sudden and exponential divergence in 2014 cannot just be explained away by the market functioning efficiently, particularly because until that point Open Energy startups had secured more annual investment than Open Finance firms.

So what happened in 2014? This was the point at which the CMA announced its provisional plans to introduce regulated Open Banking. This action accelerated the organic process, and led to more than 10 new Open Banking/Finance entrants into the market every year for six years. In contrast, Open Energy and Open Property startups remain much rarer. Not only did the introduction of regulation accelerate the number of new startups, but it also resulted in an explosion of inbound private investment. A critical driver of this was that the barriers to entry were demolished, and screen scraping was replaced by a more reliable, cheaper, and more secure method of regulated data exchange through standardised Application Programming Interfaces (APIs).

APIs are a better way to deliver the use case than under a Smart Data scheme because of three key advantages:

- **APIs are more secure.** To screen scrape, users often have to share their credentials, meaning they breach the terms of use of the product – many providers explicitly warn users not to share their username and password to avoid the risk of their data being stolen. In contrast APIs do not require user credential sharing, and data is only shared with a defined third party.
- **The data exchange is efficient, more reliable, and technically simpler once firms are integrated.** The process of copying and pasting the information through screen scraping is tricky, leading to mistakes and user mistrust. In contrast, APIs can be standardised and therefore more reliable.
- **Once built, APIs are more cost effective.** Maintaining the copying and paste screen scraping connection is expensive, and can significantly cost the original data holder as it leads to increased (and therefore more costly) web traffic. APIs also mitigate the impact of disputes, with much a more transparent relationship between API provider, and API consumer.

We have seen that across the world, APIs that enable Smart Data exchange are only created by data holders when they are mandated. In the US, where no regulation exists, screen scraping of financial information is dominant, with the few API-enabled use cases reliant on expensive and limited bilateral commercial deals. Meanwhile, from Brazil to Bahrain and Europe to South Korea, regulation has supercharged the creation of APIs. So far, however, no other jurisdictions have gone beyond financial datasets. This is where the new powers under the Data Use and Access Bill come in.

What's Missing in the UK for Smart Data To Take Off?

While the powers in the Data Bill allow the UK to launch Smart Data schemes, they will have no impact unless policymakers decide to use these powers. Under the conditions of the Data (Use and Access) Bill, every Smart Data Scheme will require the following elements to be specified, and the answers will likely vary sector by sector:

Term	Definition	Who/What In Practice
Data Holder	Who currently hosts the data and will need to unlock it	Typically a sector’s large service providers
Data Subject	Who will be able to consent to share data	Usually a consumer or business owner
Data Points	Which data points will be shared — ie. What data needs to be unlocked	The data that “belongs” to the user under GDPR
Data Standards/ Trust Framework	How the data will be shared, through a standard. This should also include a trust framework outlining the user experience of the information exchange, including consent journeys.	Likely using Application Programming Interfaces or APIs — data pipelines that enable data transfers between two parties
Authorised Third Parties	With whom an individual can share the data, including any regulations that must be adhered to.	The providers of solutions built off the top of the data that is shared, having adhered to technical and legal criteria.
Implementation Timelines	The date at which data holders must enable access to their data.	3, 6, 12, or 24 months from now.
Regulator	The body responsible for enforcing adherence to regulation.	The sectoral regulator if they exist (e.g. Finance – FCA). For non-regulated sectors, this is unconfirmed.

Introducing our Blueprint

For Smart Data to take off, the best thing that can happen is for its value to be demonstrated quickly to consumers and policymakers alike. This can only happen if some sectors take the lead in implementing their own schemes. In the next section of this report, we outline our three priority Smart Data schemes: finance, energy and property. These sectors should be just the start of a Smart Data-enabled economy and in Part 3 of our report, we outline how the Government should apply these new powers to its core missions.

In bringing Smart Data to life, it is critical that wherever possible the Government builds on excellent foundational work that has been done by industry to maximise the effectiveness and functionality of sector specific schemes and to accelerate implementation timelines. In many sectors across the economy, they are not starting from scratch. In this report, we reference examples across the finance, energy and property sectors where the Government would be able to quickly incorporate best practice.

Further, to unlock the real potential of Smart Data, the schemes that are created must be interoperable: there’s more power when schemes interact and connect seamlessly with each other. Beyond these core elements, there are also cross-sector considerations, including trust frameworks for consent, which regulator will be responsible for enforcement (including if this is different per sector), and how interoperability can be achieved. We will return to these issues at the end of the report, and focus on a critical enabler of the Smart Data economy – Digital Identity.

Open Finance

Over 11 million people have used Open Banking, with many using products and services built by the UK's £4bn Open Banking fintech ecosystem.⁴ But this is only the start of what could be achieved if the Treasury mandated more types of financial services providers to enable their customers to share their information if they consent – an expansion we are calling Open Finance.

What is an Open Finance Minimum Viable Product (MVP)?

Open Finance requires expanding the Open Banking regime to cover more financial services products, starting with:

- Savings
- Investments
- Pensions
- Mortgages

Why is Open Finance of Benefit to a Progressive Government?

Open Finance offers transformative potential for a progressive government committed to improving economic inclusion, transparency, and innovation. Open Finance can support the Government's goal of increasing financial literacy, delivery of the Pensions Dashboards programme, and increasing the accuracy of tax accounting. These efforts empower citizens with better insights into their financial health, fostering informed decision-making and long-term financial resilience. Open Finance can also streamline processes like tax accounting, improving accuracy and reducing administrative burdens

Open Finance will also be a key driver of economic growth. Consider that Open Banking included only a handful of products within its scope but has already been used by 11 million people, led to the creation of a £4bn startup sector, and the sector has already seen 14 exits.

While Open Banking is popular, Open Finance would create more possibilities for consumers, opening up a richer ecosystem of fintechs for consumers. For example, it unlocks opportunities for innovation in areas such as consumer credit risk assessments, which currently rely only on payment account data. With more comprehensive datasets, financial products can become more inclusive and tailored, serving a wider range of consumers and addressing previously unmet needs. This expanded capability enhances trust and engagement with financial services, driving the adoption of tools that support better money management.

Competition would drive growth in the financial service sector — especially as a £4bn startup sector is to fully commercialise under Open Finance. For a progressive government focused on inclusive growth, this means more jobs, greater investment in fintech, and a financial system that works for everyone, not just

⁴ <https://coadec.com/wp-content/uploads/2023/03/Open-Banking-March-2023-For-Release.pdf>

a select few. Open Finance is not just a policy opportunity; it’s a pathway to a more equitable and prosperous financial future.

Crucially, another reason to prioritise Open Finance is to establish the **limits to regulation**. One of the reasons that Open Banking has faltered in recent years is the ambiguity over elements at the edge of the regulation, including Variable Recurring Payments and certain data points. In clearly establishing what Open Finance *is*, the Government should also set out what it *isn’t*, and therefore what can then be left to the market to compete on.

Our Open Finance Vision

We believe that an Open Finance scheme should include the following components:

Component	Our Open Finance Vision
Data Holder	The providers of savings, investment, pensions, and mortgage accounts. It is aspirational for all providers of these services to be in scope, regardless of size – Open Finance must become a “cost of doing business” in these sectors of consumer finance, which would be more than justified by the value Open Finance will create.
Data Subject	The financial service customers — individuals and small businesses provided services by the specified data holders.
Data Points	All usage data that would be made available to a customer under a subject access request, which they are already entitled to make under GDPR – this would also reduce the administrative burden on existing businesses.
Data Standards/ Trust Framework	There should be mandated standards for these datasets, though the standards may differ between products. The foundational work of Open Banking Limited should be built upon, alongside the work coordinated by industry groups including the Investing and Saving Alliance and, for mortgages, the Open Property Data Organisation, and, for pensions, the Pensions Dashboards Programme Data Standards.
Authorised Third Parties	It is aspirational for all Open Banking Account Information Service Providers (AISPs) to be able to access Open Finance data with minimal to no work required – there should only be one regulated authorisation required across Open Finance.
Implementation Timelines	<p>We propose that the Government should be in a position to consult on an Open Finance scheme as soon as possible. Subsequent to this consultation, implementation timelines will differ by product and provider, and we propose:</p> <ul style="list-style-type: none"> ● Savings - main providers within six months of the SI passing ● Investments - main providers within nine months of the SI passing ● Pensions - main providers within one year of the SI passing ● Mortgages - main providers within eighteen months of the SI passing
Regulator	The Financial Conduct Authority.

Implementing an Open Finance Scheme

Savings and investment products are largely digitalised, making them relatively easy to unlock for Smart Data integration. However, areas like pensions and mortgages present potential friction due to their reliance on legacy systems and offline processes. These sectors are likely to face delays in adopting Open Finance frameworks, requiring significant time and investment to modernise their infrastructure. Bridging this digital divide will be critical to ensuring an equitable and comprehensive implementation of Open Finance.

The path forward involves leveraging existing Open Banking standards to accelerate the broader digitalisation of the financial sector. However, as the scope of Open Finance expands, so too does the complexity of its implementation. Data holders, particularly in sectors with slower digital adoption, are likely to push back on the additional compliance costs and operational adjustments required. These challenges highlight the need for government-led incentives, regulatory clarity, and collaborative industry efforts to mitigate resistance and ensure a smooth transition. An Open Finance scheme must build on the extensive body of work from industry and Government that exists in this sector, including:

- The work of the Joint Regulatory Oversight Committee (JROC)
- The FCA's 2019 Call for Input on Open Finance
- Innovate Finance's Open Finance Roadmap
- The Centre for Finance, Innovation and Technology's Open Finance Coalition
- The Investing and Saving Alliance's Open Savings, Investments & Pensions (OSIP) initiative

Next Step for an Open Finance Scheme

Unlike other sectoral schemes, the path to Open Finance is well-trodden – we have a glut of resources, expertise, and legacy consultations to draw on. Consequently, we do not believe another call for evidence is necessary. We should skip straight to the Government outlining a blueprint for implementation. Industry should comment on this, not speculate over hypotheticals.

Action One: Treasury should launch a consultation on a proposed Open Finance Scheme that includes savings, investments, pensions and mortgages.

Open Finance Case Study: Moneyhub

Moneyhub is a Bristol-based data and analytics platform that helps businesses harness their data assets. Moneyhub is an Open Finance provider, which enables customers to securely share their financial information to drive tailored products, compliance, and value.

Modern businesses face challenges such as data silos, outdated systems, and regulatory complexities like the new Consumer Duty obligation and Pensions Dashboard. Moneyhub addresses these by aggregating, categorizing, and analyzing data from various sources — bank accounts, investments, pensions, savings, loans, and beyond — offering a comprehensive view of customer finances, with customer consent.

Moneyhub in Action

- **VOXI by Vodafone:** Automates eligibility checks for social mobile tariffs and provides an AI-driven finance management app for users.
- **WPS Advisory:** Uses Moneyhub's Sharing Centre for dynamic, up-to-date client insights, enabling precise financial advice.
- **Pension Providers:** Firms including Aon, Mercer, Standard Life, Scottish Widows, and SEI incorporate Moneyhub's technology to align budgeting and spending with retirement goals, improving savings behavior.

A Smart Data Future

Moneyhub already connects data from across multiple financial products. Smart Data will further extend customer choice, increase efficiency, and open up the door to more innovation down the line. For consumers, Smart Data will improve trust and familiarity, safely in the knowledge that there are clear regulatory requirements for the providers involved.

Open Energy

One of the Labour Government's missions is to achieve net zero in the energy grid by 2030. As part of this effort, it continues to roll out Smart Meters across households, with 60% (32m) of all meters in households Smart Meters as of 2023. These meters create datasets that could accelerate energy efficiency and help encourage sustainable behaviours, but the data is currently challenging to access. A Smart Data scheme in the energy sector could remedy this complexity. If Open Energy could unlock Smart Meter data as well as other data sets valuable to the net zero transition, the UK would be better positioned to commit to Net Zero while simultaneously lowering energy bills.

Open Energy should also go beyond Smart Meters, and there is an opportunity to leverage the foundational work across the energy sector to unlock information across electricity, gas and tariffs.

What is an Open Energy MVP?

Open Energy must enable consumers and businesses to access their real-time energy usage data across electricity and gas.

Why is Open Energy of Benefit to a Progressive Government?

Open Energy would be a great way to ensure the British public can best support the 2030 clean power mission. By granting consumers greater access to their energy usage data, Open Energy could enable individuals to make smarter, more informed decisions about their energy consumption. This supports national goals for decarbonization while equipping households with tools to reduce costs during a time of heightened cost-of-living pressures and inflation. Such access fosters greater transparency and encourages behaviors that align with broader environmental objectives.

With the ability to see exactly how much energy they use and when, consumers can optimise their habits and take advantage of smart tariffs that incentivise energy use during off-peak periods. This creates immediate financial benefits for households and drives the adoption of "smart" energy systems across the country. A Smart Data framework leveraging Smart Meter data could amplify these benefits by accelerating the use of flexible energy tariffs and technologies. Empowering consumers with real-time energy insights ensures that the transition to clean power is not just a policy objective but a grassroots movement supported by informed citizens.

The economic benefits of Open Energy are equally compelling. According to the Government's Smart System and Flexibility Plan, increased flexibility in energy usage could reduce system costs by £30-70 billion between 2020 and 2050. Open Energy is a critical enabler of this vision, driving innovation in energy technologies, creating green jobs, and reducing the financial burden of transitioning to net zero. For a progressive government, Open Energy represents a unique opportunity to lead the way in clean energy adoption while ensuring fairness, sustainability, and resilience in the energy market.

In January 2025, the Government launched a call for evidence on the merits of developing an energy Smart Data scheme.⁵ In this call for evidence, the Department for Energy Security and Net Zero identified potential end use cases including supplier switching, personalisation, supporting vulnerable consumers, and reporting. Whilst it is helpful to view the merits of a scheme through the lens of use cases, it is also impossible to exhaustively predict the benefits as entrepreneurs will leverage the tools to create often unforeseen value for consumers. This is also where a huge amount of the economic growth opportunity lies.

The Core Components Needed for an Open Energy Scheme

In the January 2025 call for evidence, the Government set out an expansive scope for what a Smart Data scheme could look like in the energy sector, covering physical energy infrastructure, through electric vehicle charging points and financial services associated with energy products. There is a huge amount of opportunity across these areas, but in this report we outline the minimum viable scheme – and this starts with household energy use.

Component	Who or What in Practice Do We Actually Need?
Data Holder	An Open Energy Scheme could enable consumer data access through: <ul style="list-style-type: none"> ● Smart Meter providers ● Data aggregators ● A new super-aggregator
Data Subject	Individual consumer bill payers.
Data Points	All usage data that would be made available to a customer under a subject access request, which they are entitled to make under GDPR.
Data Standards/ Trust Framework	There should be mandated standards for these datasets, though the standards may differ between datasets. The foundational work of Ofgem in creating consent dashboards should feed into the design of a trust framework, as should Icebreaker One’s Open Energy work. ⁶
Authorised Third Parties	<p>We should aim to leverage the model used for Open Banking Account Information Service Providers (AISPs) for Open Energy Authorised Third Parties, though the data may be considered less sensitive in the energy sector. It should be as frictionless as possible for Authorised Third Parties to obtain authorisation to enable Smart Data use cases across sectors. In this way, if there is a hierarchy of authorisations based on data sensitivity, firms that have the highest level of authorisation should automatically be able to offer services on less sensitive datasets.</p> <p>For example, if an Open Banking AISP authorisation is more stringent than Open Energy AISP, then Open Banking AISPs should automatically obtain Open Energy AISP permissions.</p>

⁵ <https://assets.publishing.service.gov.uk/media/6784d6e4f041702a11ca0eb6/developing-energy-smart-data-scheme-cfe.pdf>

⁶ <https://openenergy.org.uk/about/>

Implementation Timelines	The January 2025 call for evidence is an excellent first step. This closes in March 2025. We would like to see a consultation on a Smart Data scheme covering households energy use before Summer recess. The Government's 2030 goal necessitates urgency in introducing Smart Data in the energy sector. We would therefore like to see a statutory instrument introduced within a year of the Data Use and Access Bill passing.
Regulator	Ofgem

Challenges Facing an Open Energy Scheme

Implementing an Open Energy scheme comes with several challenges, particularly around the accessibility, reliability and coverage of the existing datasets. While Smart Meters hold immense potential to revolutionise energy data, their incomplete rollout and varying levels of functionality currently limit the value of the data they generate. These gaps hinder the ability to create impactful systemic changes in the energy sector. Universal deployment of advanced Smart Meters is critical to ensuring that data-driven insights can deliver tangible benefits to both consumers and the energy grid.

A significant barrier to Open Energy is the lack of a standardised, interoperable data framework across Smart Meter providers. Without such a standard, integrating and sharing data at scale becomes complex, fragmented, and inefficient. Today, this gap is solved by the existence of a handful of data aggregators, which provide access to aggregated and enriched datasets, usually for a fee. Electralink and Smart DCC provide access to electricity and Smart Meter data, Elexon aggregates settlement data, Xoserve aggregates gas datasets, and the Retail Energy Code Company (REC Co) holds datasets necessary for supplier switching.

These providers offer a key service today and without them it would be extremely challenging to enable users to access their data, either directly or through service providers like startups who do not have the resources, time and money to aggregate disparate datasets themselves. Consequently, when designing a Smart Data scheme in the energy sector, the Government must account for this reality. We believe there are three implementation models that could work, all with the fundamental objective of enabling users to access their data:

1. Access through the underlying service providers
2. Through the data aggregators across the energy sector. These would be Electralink, Elexon, Xoservice, the Retail Energy Code Company, and Smart DCC.
3. Through a new super-aggregator body, which would sit above the data aggregators in option two.

Each of these options would have trade-offs, and none are perfect. The priority is, therefore, exploring the merits of all three.

Next Steps for an Open Energy Scheme

Action Two: After the call for evidence in Q1 2025, the Department for Energy Security and Net Zero should consult on the design of a Smart Data scheme covering household energy use before Summer recess 2025.

Open Energy Case Study: Eliq

Eliq simplifies the process of accessing and utilizing smart meter data, enabling businesses to use energy insights with customer consent. Energy efficiency and carbon reduction are global priorities, yet significant barriers impede progress. Businesses often struggle to integrate and utilise energy data due to technical complexities, regulatory compliance requirements, and customer concerns over data consent and security. These challenges slow innovation and prevent businesses from realising the full potential of energy data.

Eliq in Action

- **Smart Home Innovations:** Companies use Eliq's data integration capabilities to power smart home apps that provide real-time insights into energy usage, enabling users to reduce consumption and lower costs.
- **Energy-Efficient Products:** Businesses leverage the platform to introduce energy-efficient devices and services that align with user needs, enhancing engagement and satisfaction.
- **Sustainability-Focused Solutions:** By accessing granular energy data, companies can develop solutions that support carbon reduction goals, from renewable energy optimization to personalised energy-saving recommendations.

A Smart Data Future

Open Energy Data initiatives further streamline the integration of diverse datasets, enabling companies like Eliq to scale solutions and deliver value at an accelerated pace. With expanded data access, energy companies can innovate more effectively, providing solutions that meet the dynamic needs of modern consumers.

Open Property

The property purchasing process is complex, duplicative and inefficient. A critical flaw in the process is the lack of digitalisation which increases cost and process length. These delays increase the chance of a sale falling through, with fall throughs costing UK consumers £260m per year, and estate agents and conveyancers over £1bn per year.⁷

The Labour Government is aiming to significantly increase the number of new homes being built in the UK, but without addressing the issues in the home-buying process, this is only going to compound buyer frustration and inefficiency. Today the exchange of information within this process is sometimes analogue, siloed and inaccessible, with many steps involving duplication across different parties. Smart Data presents a new way of changing this.

What is an Open Property MVP?

Open Property must accelerate the digitalisation of the home buying process, specifically through the creation of real-time APIs to support the delivery of checks required as part of the due diligence stage.

Why is Open Property of Benefit to a Progressive Government?

Unlocking property data could help the property market move faster and more efficiently — and with fewer cases of fraud — all of which helps Labour’s goal to get Britain building again. In the first place, Smart Data would catalyse digitalisation and standardisation across the property market, providing the core foundations for a more reliable and efficient process.

The conveyancing process is currently one of the most stressful and uncertain aspects of property transactions, fraught with delays, hidden risks, and inefficiencies. With the integration of Smart Data, clearer and more reliable information could significantly reduce the costs and timelines of buying or selling a home. This would not only increase the likelihood of transaction completions but also alleviate the headaches for individuals navigating the complexities of real estate. By creating a smoother and less risky experience, Open Property could foster greater trust and participation in the housing market.

Approximately 3 in 10 property sales in the UK fall through, leading to considerable financial and emotional losses for buyers, sellers, and the wider economy. Smart Data has the potential to reduce these failures by providing real-time insights and improving the decision-making process for all parties involved. For a progressive government focused on creating a fairer and more efficient housing market, Open Property represents a vital step toward reducing waste, increasing access, and driving meaningful progress in the real estate sector. Improving this process for home buyers will represent a significant political win, highlighting the government’s action on its commitment to improve citizens’ lives.

⁷ 2023, TPX Impact research on the home buying and selling process, completed on behalf of DLUHC (unpublished). See

<https://assets.publishing.service.gov.uk/media/66190f98679e9c8d921dfe44/smart-data-roadmap-action-the-government-is-taking-in-2024-to-2025.pdf>

The Core Components Needed for an Open Property Scheme

Component	Who or What in Practice Do We Actually Need?
Data Holder	<p>There are numerous checks that could be included in scope of a Smart Data scheme in the property sector, and the data source for each of these is different. Data holders that could be required to introduce functionality include:</p> <ul style="list-style-type: none"> • Land Registry to support the title deeds, ownership, leaseholds and rights of way checks • Local Authorities • Water Authorities • The Environment Agency to support environmental searches including risks such as flooding, contamination, subsidence, and radon gas • The Coal Authority to support with subsidence checks • Local Highways Authorities • The Insolvency Register
Data Subject	The homeowner and homebuyer.
Data Points	Data required to satisfy the due diligence check.
Data Standards	There should be mandated standards for these datasets, though the standards may differ between datasets. Any scheme should utilise the foundation work laid by the Open Property Data Organisation, including the Property Data Trust Framework.
Authorised Third Parties	Authorised Third Parties in an Open Property Scheme should have to adhere to proportionate standards to become regulated.
Implementation Timelines	Needs to occur within 24 months of the launch of the timeline — as we are currently in a multi-faceted housing crisis.
Regulator	To be determined, but will need to interact with sectoral regulators, including the Council for Licensed Conveyancers, the Conveyancing Association, the Law Society, the Royal Institution of Chartered Surveyors, and the Council of Property Search Organisations.

Challenges Facing an Open Property Scheme

Property transactions are notoriously intricate, involving multiple actors such as estate agents, solicitors, surveyors, lenders, and local authorities. It is also imperative that data shared in the property purchasing journey is trusted, as the process has significant legal risk exposure. This complex ecosystem means that opening up data sets will require extensive collaboration across the sector. Achieving consensus on standards, data sharing protocols, and governance will be a formidable but essential task to unlock the potential of Open Property. This is a key reason for why this should be an early focus of Smart Data schemes, as this is an industry with significant value potential that is unlikely to be unlocked without concerted government action.

The real estate sector is comparatively analogue, with varying degrees of digitalisation across the supply chain. Despite advancements in technology, many processes within the property supply chain remain

reliant on paper documents, manual workflows, and siloed data systems. This lack of digitalisation creates barriers to the seamless integration and accessibility of data, further complicating the transition to an open data framework. Bridging this gap will require substantial time, investment, and skills-building efforts to bring all stakeholders to a common digital baseline. Further there are also additional complexities presented by individual data providers, such as the Coal Authority, which provide data on a broad geographical area, rather than individual properties.

Fortunately, the Ministry of Housing, Communities and Local Government (MHCLG) would not be starting from scratch, with extensive foundational groundwork laid by the Open Property Data Organisation, which is already in the process of piloting the Property Data Trust Framework with a group of early adopter organisations. In 2023, the then Government set up the Digital Property Market Steering Group, which also offers a key strategic body to support the design of a Smart Data scheme in the property sector. Further, under the Levelling-up and Regeneration Act 2023, Local Authorities are required to make information like Local Plans available for third party consumption, with extensive work underway by MHCLG to support them to digitalise.⁸

Many of the datasets that would plausibly fall within the scope of Open Property, unlike with Open Banking and Open Energy, are currently held by public sector bodies, which adds complexity, but also represents an opportunity to move at pace, as there are greater opportunities to leverage the commitments in the newly published Blueprint for modern digital government such as the mandate to provide APIs for all public sector datasets. This will also provide a practical step for the government to take on building out a National Data Library by setting up a specific use case for how public sector data accessible through a Smart Data scheme could support economic growth and digital innovation in a particular sector.

Next Steps for an Open Property Scheme

Action Three: The Ministry of Housing, Communities and Local Government alongside DSIT should launch a Call for Evidence on the Merits and Design of an Open Property Scheme.

⁸ <https://www.planning.data.gov.uk/>

Open Property Case Study: Moverly

Moverly's platform brings together estate agents and conveyancers. This enables all stakeholders to share data more effectively and to work more efficiently using a Digital Sale Ready standard for home-moving. They are also in the process of piloting the process with leading banks.

The property sector faces significant challenges with fragmented processes and disconnected systems. Moverly integrates with existing tools to streamline workflows and strengthen partnerships between property stakeholders. The focus is on practical, measurable improvements to property transactions, specifically addressing the 1 in 3 property transactions that fall through.

Moverly in Action

Moverly provides data solutions for property professionals through its commercial business. By leveraging the Property Data Trust Framework (PDTF), the technology enables secure and standardised data sharing to streamline property transactions. Its platform centralises property information from the outset, allowing estate agents and conveyancers to access and share critical data efficiently.

A Smart Data Future

The inefficiencies in the current property transaction process cause an annual loss of £75 billion in potential transaction value — value that is literally slipping through our fingers due to sales falling through. Smart Data in the property-buying process could close this gap, capturing the full economic potential within the existing market. By enabling secure, standardised access to property data through the PDTF, Smart Data could reduce duplicate information requests, accelerate verification processes, and create more reliable property records.

For estate agents, Smart Data will further reduce transaction times and strengthen their ability to provide accurate, comprehensive property information from day one. Conveyancers will benefit from enhanced due diligence capabilities and streamlined document management, allowing them to handle more transactions efficiently while maintaining high standards.

Open Even More

The three schemes outlined above should be the priority sectors for the Government to bring Startups to life, but it is only the start. The real value and opportunity of Smart Data comes from the synthesis and combination of datasets from across the economy.

Smart Data Governance

Smart Data needs a governance framework that is as dynamic and innovative as the technology it supports. Interoperability across sectors is the key to unlocking its full potential, driving competition, fostering innovation, and transforming public services. To optimise this interoperability, both from a technical and governance perspective, there must be a central body responsible for cross-sector coordination. This isn't just a regulatory necessity; it's a cornerstone of any successful industrial strategy to position the UK as a leader in the data economy. This function does not yet exist, so the Government must create it.

Action 4: The Department for Science, Innovation and Technology should conduct a call for evidence on cross-sector Smart Data Governance, specifically looking at the viability of this sitting with the Regulatory Innovation Office.

Governance must prioritise flexibility and decentralization, allowing individual sectors to innovate at their own pace within a cohesive regulatory structure. Building on what already exists — whether it's Open Banking or sector-specific sandboxes — ensures we don't reinvent the wheel or create obstacles to progress. Smart Data regulation should act as an enabler, amplifying incentives for innovation and ensuring fairness without stifling creativity. A domain-by-domain rollout allows for quicker wins and adapts to sector-specific challenges without the delays of a one-size-fits-all approach.

To future-proof Smart Data, governance should prioritise adaptability. A principles-based approach allows for scalable, fast implementation while tackling challenges as they emerge, rather than overengineering from the start. Legal clarity, liability structures, and technical standards should work together to create seamless user experiences. Trust won't come from mandates alone — it requires visible political support, tangible investments in infrastructure, and a commitment to making Smart Data a win for both people and businesses. By embedding these principles, Smart Data governance can be a launchpad for innovation that truly changes the game.

But to maximise the effectiveness of sector-specific schemes, and to optimise interoperability, there should be an overarching regulatory function that maintains a central register of authorised third party permissions, performance of APIs from in scope data holders, and a gateway for firms exploring cross-sector Smart Data use cases. This function does not exist, and the Call for Evidence should seek to understand views on where it could be created.

There are a few options for where this function could sit. Firstly, the Information Commissioner's Office (ICO) already has cross-sector data regulatory authority and owning Smart Data governance could enable the ICO to adopt a pro-growth agenda. Alternatively, there could be a role for the Digital Regulation Cooperation Forum in coordinating between regulators. For us, however, the most intuitive

home for this is the Regulatory Innovation Office (RIO), launched in October 2024. When it was announced, the Government set out that RIO would “support regulators to update regulation, speeding up approvals, and ensuring different regulatory bodies work together smoothly” – this would be a good early test for the RIO’s ability to do so.⁹

Mission-Driven Smart Data

To progress this cross-sector opportunity, the last Government published a Smart Data Roadmap outlining key sectors that would be best suited for Smart Data Schemes.¹⁰ This work instigated initial scoping across Government, but the General Election in 2024 scuppered this initial Roadmap, with many of the timelines outlined for each sector missed. For instance, the Department for Transport was aiming to conduct a Call for Evidence on Smart Data in mobility in Autumn 2024, meanwhile there was supposed to be tangible progress in Open Finance, Open Telecommunications, and Open Retail by a similar time.

We need a new roadmap, with Open Finance, Open Energy and Open Property as the priorities:

Specifically, Labour’s five missions offer the perfect foundations for a new roadmap.¹¹ Smart Data schemes could help to achieve each of these five missions more effectively, will intersect and reinforce one another, and offer opportunities for innovators and investors.

- **Kickstart Economic Growth:** Smart Data can act as a core enabler of growth, through simultaneously delivering value to customers and through supercharging innovation and the creation of startups that attract inbound investment. Overall, the value of the Smart Data economy has been estimated to be £27.8bn.¹²
- **Make Britain a Clean Energy Superpower:** Combining datasets can accelerate decarbonisation, support more accurate forecasting and prioritisation, and also empower consumers to take action to reduce their bills. The work of initiatives like Project Perseus, which unlocks finance for SMEs by automating emissions reporting, will be critical in underpinning this focus.¹³
- **Take Back Our Streets:** Smart Data could be a critical accelerant of digitalisation and data use in crime prevention and enforcement. In particular, serious and organised crime (SOC) is increasingly seen by citizens as a major threat that affects their day-to-day lives, and more effective data sharing via Smart Data would underpin more effective ways to combat fraud, a

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<https://www.gov.uk/government/news/game-changing-tech-to-reach-the-public-faster-as-dedicated-new-unit-launched-to-curb-red-tape>

¹⁰

<https://assets.publishing.service.gov.uk/media/66190f98679e9c8d921dfe44/smart-data-roadmap-action-the-government-is-taking-in-2024-to-2025.pdf>

¹¹ <https://labour.org.uk/change/mission-driven-government/>

¹² <https://26096792.fs1.hubspotusercontent-eu1.net/hubfs/26096792/180913%20DCMS%20Report%20final.pdf>

¹³ <https://ib1.org/perseus/>

major component of SOC, and reduce the UK's vulnerability to corruption and other enablers of organised criminal activity.¹⁴

- **Break Down Barriers to Opportunity:** There is significant scope for better data sharing between service providers in early years, education and lifelong learning. Greater portability of data enabled by Smart Data schemes would improve outcomes for children in nursery settings, support transitions between stages of education and help provide better career advice, financial literacy education and training guidance for citizens at all stages of life.¹⁵
- **Build an NHS Fit for the Future:** An effective shift from treatment to prevention would save the NHS billions of pounds, improve health outcomes and put citizens in greater control of their own health. As smart health monitoring and digital healthcare grow in popularity, Smart Data schemes designed to complement and integrate with an NHS-specific digital health record would play a key role in enabling a truly preventative approach.¹⁶

Action 5: The Government should refresh its Smart Data Roadmap around its five missions.

¹⁴ <https://institute.global/insights/public-services/a-new-approach-to-serious-and-organised-crime-in-the-uk>

¹⁵ <https://institute.global/insights/public-services/future-of-learning-delivering-tech-enabled-quality-education-for-britain>

¹⁶ <https://institute.global/insights/public-services/preparing-the-nhs-for-the-ai-era-a-digital-health-record-for-every-citizen>

Smart Data & Digital Identity

As Smart Data governance evolves, it must align with emerging Digital ID frameworks and integrate seamlessly with digital wallets. A digital ID provides a secure, verified representation of a person's identity in digital form, while a digital wallet serves as a tool to store, manage, and utilise digital IDs and other credentials in both online and offline transactions. By serving as a central hub for data sharing permissions, digital wallets will give consumers direct control over which third parties can access their information and for what purpose, while also enabling them to connect multiple third parties directly.

The current approach to Smart Data, as used in Open Banking, is essentially peer-to-peer, with exchanges of information occurring between different providers with consent by a user of both services. As more schemes are introduced and the complexity of the landscape grows, this will become increasingly difficult to manage and track for consumers, creating security risks and sowing confusion. To address this issue, the government should look to integrate Smart Data with digital ID wallets – at a minimum, the newly announced GOV.UK wallet that will be launched in Summer 2025; and ideally, a way to integrate with the private-sector providers regulated under the proposed Digital Verification Service framework. To ensure parity between providers of digital ID wallets,

This will unlock the compound benefits of interoperability *between* Smart Data schemes and not just within them. For example, during a property purchase, a buyer could use their digital wallet to seamlessly share their financial status through Open Finance with an estate agent using Open Property, while also enabling information to flow between Open Property, Open Energy and Open Finance schemes to secure a better deal on a green mortgage based on their historical energy use and the property's EPC rating. This interconnected system, anchored by digital ID, would allow consumers to benefit from linking multiple Smart Data services while maintaining control over their data, ensuring they are active participants rather than passive observers in the Smart Data ecosystem.

Action 6. The Government should ensure that future Smart Data schemes include credentials for storage within the GOV.UK digital wallet and ensure parity of basic functionality between public and private sector wallets for the sharing of these credentials between users of Smart Data.

Concluding Checklist

The next steps to creating a Smart Data ecosystem in the UK are simple.

Step 1: Pass the Data Use and Access Bill as introduced

Step 2: Progress the Three Priority Schemes

- **Action 1:** Treasury should launch a consultation on a proposed Open Finance Scheme that includes savings, investments, pensions and mortgages.
- **Action 2:** After the call for evidence in Q1 2025, the Department for Energy Security and Net Zero should consult on the design of a Smart Data scheme covering household energy use before Summer recess 2025.
- **Action 3:** The Ministry of Housing, Communities and Local Government alongside DSIT should launch a Call for Evidence on the Merits and Design of an Open Property Scheme.

Step 3: Smart Data Across The Economy

- **Action 4:** The Department for Science, Innovation and Technology should conduct a call for evidence on cross-sector Smart Data Governance, specifically looking at the viability of this sitting with the Regulatory Innovation Office.
- **Action 5:** The Government should refresh its Smart Data Roadmap around its five missions.
- **Action 6.** The Government should ensure that future Smart Data schemes include credentials for storage within the Gov.UK digital wallet and ensure parity of basic functionality between public and private sector wallets for the sharing of these credentials between users of Smart Data.

