Scoping the potential for digital planning

to ease resource pressures and improve planning outcomes

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RTPI Cymru
Royal Town Planning Institute
Sefydliad Cynllunio Trefol Brenhinol

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The Royal Town Planning Institute (RTPI)

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About this briefing

This RTPI research briefing explores the current capacity of Local Planning Authorities (LPAs) in Wales to engage with digital planning, with the broader aim of easing resource pressures and improving planning outcomes. While digital technologies have become embedded in many aspects of planning practice, the planning system in Wales has not undergone the same level of digital transformation seen in England and Scotland. This research addresses a critical gap in understanding how digital planning is currently used in Wales, what barriers exist, and what opportunities could be realised through more strategic and coordinated digital reform.

Authors

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Dr. Ruth Potts is a Senior Lecturer in Spatial Planning with an interest in digitalisation of planning systems and the impact of digitalisation on planning processes and outcomes. Ruth's work has especially focussed on the impacts of digitalisation on planning theory and practitioner experiences. She has published papers exploring digitalisation of public participation processes, the impacts of AI bots on real estate and development projects, and international comparisons of planners' digital literacy and skills.

Dr Brian Webb is a Reader in Spatial Planning whose research focuses on how digital transformation is reshaping planning practice, decision-making, and public engagement. His work examines the role of digital planning and the public interest, alongside broader issues related to data governance and the use of digital technologies in planning systems. He has co-authored studies benchmarking the adoption of digital tools among planners in both the UK and internationally.

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Executive summary

Context

Digital technologies have evolved rapidly in the last three decades and are now used daily by planners to process applications, visualise data, communicate with stakeholders, and complete administrative tasks. Despite this integration of digital technology into planning practice, the planning systems within all UK nations have largely remained static in their legal requirements, processes and methods. Simultaneous to these changes, planners in the UK's devolved planning systems and local planning authorities have faced declining resourcing, growing workloads, and challenges recruiting and retaining staff. While several digital planning pilot projects have been launched/implemented in England and Scotland since 2020, progress in Wales has been slower and more focused on broader issues of public service delivery, digital inclusion, foundational infrastructure, and some exploratory work in planning. As a result, there is a gap in our understanding of digital planning practices in Wales.

This report establishes a benchmark of digital planning practices in Wales, and the capacity of local planning authorities (LPAs) to engage with digital planning. A desktop review of existing policies, online survey, and two focus groups with professional planners in Wales revealed significant variation in the technical capacity of LPAs to adopt more advanced digital planning technologies. The study also found that there is currently no dedicated digital planning strategy or standards for digital practices in Wales, and while good practice examples exist, there are limited opportunities for planners to share and learn from them. Despite the challenges, Welsh planners are optimistic about the potential of digital tools to improve planning outcomes, increase efficiency and transparency, and make planning processes more inclusive. Drawing on the research conducted, the report identifies six key findings and makes six digital planning recommendations to ease resource pressures and improve planning outcomes.

Key findings

Digital planning can improve planning's reputation in Wales. The planning system in Wales is often seen as inefficient and lacking transparency, largely due to outdated and fragmented processes. Digital planning is viewed as a promising solution to improve efficiency, accessibility, and public trust in the system.

There is no dedicated digital planning strategy in Wales. LPAs are navigating digital transformation independently, often without clear guidance or shared standards. This has led to fragmented systems, inconsistent data practices, and missed opportunities for collaboration.

Digital capacity is uneven across LPAs. While most planners are confident using standard digital tools, the adoption of more advanced technologies, such as GIS, AI, and digital engagement platforms, varies significantly. Some LPAs are innovating, while others remain reliant on hybrid/paper-based systems and legacy infrastructure due to a range of capacity, training, and resource constraints.

Good practice exists but is not widely shared. Innovative uses of digital tools, such as AI for summarising consultation responses and integrated workflow systems, are emerging, but there is no formal mechanism for sharing these approaches, as well as potential issues and barriers, across LPAs.

Standardisation, leadership, and collaboration are essential. Planners identified the lack of common data formats, software systems, and planning processes as key barriers. Stronger national leadership and a coordinated governance framework are needed to support consistent and scalable digital planning.

Barriers include skills gaps, resource constraints, and organisational culture. Many planners lack access to training in advanced digital tools, and time and resource pressures often prevent experimentation, knowledge exchange, and institutionalisation. Respondents identified that officers within LPAs often lack the internal capacity or confidence to lead digital change.

Digital planning must be part of wider planning reform. Planners are optimistic about the potential of digital tools to improve efficiency, transparency, and public engagement. However, these benefits will only be realised if digital transformation is embedded within a broader strategy to strengthen the planning system, supported by adequate funding and leadership.

Recommendations

Based on the findings of this study, several actions are required to progress digital planning in Wales to ease resource pressures and improve planning outcomes. Full discussion of these recommendations can be found on page 59.

Develop a Digital Planning Governance Framework for Wales

Establish a national framework to guide digital planning transformation, with a focus on standardising data formats, software systems, and planning processes. This will ensure consistency, interoperability, and a shared foundation for change.

Establish clear leadership for digital planning

Create a national governance body to oversee implementation, coordinate collaboration, and define a baseline of digital capability for all LPAs. This body should include representatives from Welsh Government, RTPI Cymru, LPAs, and digital service partners.

Create a Wales-wide spatial data infrastructure

Develop a centralised platform for planning data. This platform should host standardised GIS layers, live and historic planning data, and tools for analysis and public access, supported by rigorous data governance protocols.

Promote collaboration and shared learning

Facilitate cross-sector training and peer learning networks to build digital capacity across LPAs. Training should be tailored to different roles and include both practical skills and strategic digital literacy for leadership. RTPI should take a lead role in the provision of Continuing Professional Development (CPD) linked to this.

Streamline planning processes through digital tools

Identify opportunities to simplify and automate planning processes using digital tools. This should include reducing duplication, improving transparency, and enhancing public engagement, with input from practitioners to ensure tools meet real-world needs.

Modernise planning legislation to enable digital transformation

Review and update legislation to embed digital requirements into statutory planning functions. This may include mandating the use of standardised digital systems, open data formats, and digital-first plan-making and development management processes. Any changes must be supported by appropriate training, infrastructure, and funding.

Ultimately, this report argues that while there is strong enthusiasm for digital planning among Welsh planners, realising its full potential will require coordinated national action. The recommendations outlined, ranging from the creation of a Digital Planning Governance Framework and a Wales-wide spatial data platform to legislative reform and targeted training, are designed to address the uneven digital capacity across LPAs, the lack of standardisation, and the absence of a coherent policy framework. By implementing these measures, it is possible to enable the conditions for digital planning to ease resource pressures and improve planning outcomes through consistent systems, empowered professionals, and a planning process that is more transparent, efficient, collaborative, and accessible. These actions are necessary not only for modernising planning practice but also for building a more resilient and future-ready planning system across Wales.

Introduction

This project **explores the current capacity of Local Planning Authorities (LPAs) to engage in digital planning in Wales**, to provide a baseline and form the foundation for further work in this area, with the broader aim of easing resource pressures in planning and improving planning outcomes. This research builds on the 2023, the State of the Profession and Building capacity through collaboration and change RTPI and RTPI Cymru research papers that found that the planning profession is facing considerable resourcing challenges. The planning systems in the devolved nations are simultaneously faced with significant backlogs in planning decisions, labour shortages of planning professionals, and the underfunding of LPAs. That research took a Wales specific focus and further emphasised that **there has been a progressive decline in resources in LPAs across Wales**. The decline in resourcing combined with an increase in expectations by those that engage with the planning system has impacted the capacity of the Welsh planning system to deliver good planning outcomes.

In the last 30 years, digital technologies have increasingly become an integral element of planners' day to day work and are now used by most planners to write reports, read legislative and other documents, and interact with stakeholders via email or other digital platforms. **Despite the rapid evolution of technology, the planning systems within all UK nations have not substantially changed their legal requirements, processes or methods in the same time frame.** Consequently, in 2020 the UK Government published the Planning for the Future White Paper that identified a need to upgrade the English planning system using digital technologies and recognising that the existing planning system was no longer 'fit for purpose'. In 2021 an independent Digital Planning Taskforce published a report summarising the existing status of digital planning in England and specific recommendations for digital planning reforms of the planning system. Since the publication of both documents, the English and Scottish Governments have progressively developed and implemented a range of pilot projects seeking to address identified resourcing, productivity, and procedural issues in their planning

system with digital solutions.

To date, much of the research and exploration of digital planning practices in the UK has been focussed on practice in England. As a result, there is a gap in our understanding of digital planning practices in Wales. Responding to this gap, **this research explores digital planning in a Welsh context** and establishes an understanding of current practices and expectations of digital planning within the planning system.

Project aims

The aims of the project are:

- To scope the current technical capacity within LPAs in Wales;
- To identify existing LPA policies to guide digital transformation within planning;
- To identify examples of good practice within Wales or that could inform the development of digital planning in Wales;
- To identify conditions that could enable the development of digital planning in LPAs in Wales;
- To identify barriers to developing digital planning in LPAs in Wales; and
- To identify how digital planning could contribute to positive planning outcomes in Wales.

The project began with a desktop review of digital planning in Wales, drawing on current research, legislation and planning policies to establish the current inclusion of digital planning in the Welsh and British other planning systems. This review was then used to inform the development of an online survey and two focus groups of planners across Wales to explore planners' experiences and perspectives on digital

planning in practice. The survey and focus groups were completed between March 2025 and June 2025. **The following report presents the findings of the above data collection and makes recommendations for digital planning in Wales.**

Digital planning in Great Britain

In recent years, governments in Great Britain have each embarked on distinct yet converging paths toward modernising their planning systems through digital transformation. England and Scotland have led the way with a range of strategies, legislative reforms, and targeted investments aimed at creating more transparent, efficient, and user-friendly planning services. England's approach, driven by the Planning for the Future White Paper and the Levelling-up and Regeneration Act 2023, focuses on standardising planning data and expanding digital infrastructure. Scotland's efforts are guided by the Transforming Places Together strategy and the Planning (Scotland) Act 2019, with a strong emphasis on national data standards, digital tools, and community engagement. Wales, while at an earlier stage, is laying some groundwork through broader digital inclusion initiatives and foundational investments. Led by the Centre for Digital Public Services and the Digital Strategy for Wales, the Welsh Government is exploring ways to modernise planning within a wider public service transformation agenda. Although lacking a dedicated digital planning strategy, Wales is making incremental progress through targeted funding and service design improvements. The following sections **explore the evolving digital planning landscape across the three nations of Great Britain**, highlighting their shared ambitions and differing approaches.

England

In August 2020, the UK Government identified the need to prioritise digital transformation within the planning system. This recognition was formalised through the publication of the Planning for the Future White Paper by the Ministry of Housing, Communities and Local Government (MHCLG). **The White Paper outlined a comprehensive reform agenda for the planning system in England, centred on**

a digital-first approach. It proposed the need to transition from a traditional, document-based model to a modern, data-driven planning framework that leverages digital technologies to enhance transparency, efficiency, and public engagement. To achieve this transition, the White Paper proposed:

1. Enabling LPAs to implement digital technologies that facilitate greater public participation in the preparation of local plans and planning decisions.

2. Requiring local plans to be created using uniform, machine-readable digital data standards.

3. Harmonising and making publicly accessible the essential datasets that form the foundation of the planning system.

4. Partnering with technology firms and planning authorities to upgrade and streamline the digital infrastructure used for submitting and managing planning applications.

5. Creating a PropTech Innovation Council to foster collaboration with the UK's property technology industry and drive innovation in digital planning.

To implement the objectives outlined in the Planning for the Future White Paper, **MHCLG established a dedicated Digital Planning Programme**. This initiative was designed to improve accessibility to planning data, accelerate and streamline the decision-making process, enhance public engagement through the use of digital platforms, and simplify the overall plan-making process to ensure greater efficiency and effectiveness.

In October 2023, a suite of reforms aimed at modernising the planning system in England were introduced through the Levelling-up and Regeneration Act 2023. A central component of these reforms is the expansion of digital planning practices and the governance of planning data. **The Act grants the UK Government new powers to standardise, manage, and open-up planning data across local authorities in**

England, with the goal of creating a more transparent, efficient, and user-friendly planning system.

Sections 84 to 88 of the Act establish five key powers related to planning data. Section 84 provides the government with authority to regulate how planning data is processed by planning authorities. Section 85 enables the government to mandate the provision of specific planning data in standardised formats. Section 86 allows the government to require certain planning data to be made publicly available. Section 87 provides the government with the ability to require planning authorities to use approved software that complies with national data and interoperability standards. Section 88 clarifies that the disclosure of planning data under these provisions does not infringe copyright.

The implications for LPAs are significant. Once specific regulations are issued by the Secretary of State, they will be **required to align their systems and practices with national data standards, adopt compliant digital platforms, and ensure that planning data is accessible and reusable**. These changes are aimed at reducing administrative burdens, improving decision-making, and making planning services more responsive to community needs. To action this work, the UK Government announced a £10 million funding boost to advance digital innovation in the planning system. This investment is designed to support the next phase of the Open Digital Planning (ODP) programme, with £5.5 million allocated to help local authorities adopt and scale open-source digital planning tools, such as the Back Office Planning System (BOPS) and PlanX. An additional £3 million has been dedicated to the development of a national planning data platform, aimed at improving data access, standardisation, and interoperability across the planning system. The remaining £1.5 million will be used to fund user research, training, and support implementation and adoption of digital tools. Much of the above funding is, however, provided to selective local authorities in England rather than as a comprehensive funding package across all local authorities and as such carries **risks of some local authorities transitioning towards digital planning faster than others**.

Scotland

The Scottish Government has focused on digital planning through its strategy Transforming Places Together, launched in 2020. This **strategy outlines a long-term vision to create a fully digital, inclusive, and efficient planning system by 2026**. It was underpinned by a five-year investment programme totalling £35 million, which seeks to support a wide range of initiatives aimed at modernising planning services across Scotland. Central to this transformation is the Digital Planning Transformation Programme, which operationalises the strategy through a series of targeted projects. **One of the flagship initiatives is the creation of a Digital Planning Hub**, a centralised online platform that aims to provide planners and the public with access to tools, templates, data standards, and best practice resources.

Another major focus of the programme is the development of national data standards and interoperability frameworks. These **standards aim to ensure that planning data is consistent, machine-readable, and usable across different systems and local authorities**. The work is complemented by pilot projects testing advanced digital tools, including 3D visualisation and mapping technologies. The programme also explores the use of artificial intelligence and automation to streamline planning workflows.

Legislative changes to support digital planning in Scotland are primarily being implemented through the Planning (Scotland) Act 2019. These changes are designed to modernise the planning system by embedding digital tools, data standards, and more transparent processes into statutory planning functions. The Planning (Scotland) Act 2019 serves as the legislative foundation for many of the digital planning initiatives currently underway. While the Act does not mandate specific digital technologies, it introduces some structural changes that facilitate digital transformation. For example, it reforms the process for preparing Local Development Plans (LDPs), introducing new requirements such as Evidence Reports and a Gate Check stage. These elements are intended to be supported by digital data, enabling more efficient and transparent plan-making. The Act also places a stronger emphasis

on community engagement, which is increasingly being delivered through digital channels to broaden participation and accessibility.

Looking ahead, the Scottish Government has signalled its intention to introduce further legislative changes to support digital planning. These may include requirements for the digital submission and processing of planning applications, obligations to publish planning data as open data, and mandates to ensure interoperability between planning systems and other public sector digital services. Such changes are likely to be introduced through amendments to existing planning regulations or through new statutory guidance issued under the 2019 Act. **Concerns remain however due to reductions in funding for planning and housing within the 2024-25 Scottish Government budget**.

Wales

Compared to England and Scotland**, Wales is in an earlier phase of work on digital planning initiatives**, focusing more on broader issues of digital inclusion, foundational infrastructure, and exploratory work in planning. Key work in this area began in 2020 with the creation of the Centre for Digital Public Services (CDPS) which plays a central role in delivering the Welsh Government's digital ambitions. Established as a non-statutory body, working closely with Welsh Government departments, local authorities, and other public service providers, to lead digital transformation across the public sector, CDPS has received over £4.9 million in funding to date. Its work includes supporting local authorities in adopting digital tools, promoting user-centred service design, and facilitating collaboration between government, health, and education sectors. In the 2025-26 financial year, CDPS received an additional £260,000 to support digital innovation specifically in planning and economic development. **One of its current areas of focus is improving the pre-application process within the planning system, using user research and service design methods to identify and address barriers.**

In 2021, The Digital Strategy for Wales was introduced which sets out a national

framework for leveraging digital technologies, data, and innovation to improve public services and enhance the lives of people across Wales. The strategy is organised around six core missions. These include modernising public services to be more user-centred, secure, and accessible; promoting digital inclusion to ensure all individuals have the skills, access, and confidence to engage with digital services; and building digital capability across the workforce. Additional missions focus on supporting the digital economy, expanding high-speed internet infrastructure, and encouraging ethical data use and collaboration across sectors. While still in effect, there have been limited updates on the implementation of the strategy in the last few years.

Wales has also prioritised digital inclusion through a series of targeted programmes. The Digital Communities Wales initiative, which concluded in 2025, aimed to reduce digital exclusion among vulnerable groups. It has since been replaced by a new National Digital Inclusion Programme, supported by a £10 million contract over three years. This programme includes the deployment of regional and thematic digital skills advisers, the mapping of digital inclusion services, and the development of updated resources. It also promotes collaboration across sectors to ensure that digital services, including those related to planning, are accessible to all communities, particularly those at risk of digital exclusion.

The Welsh Government has further invested in digital transformation across other sectors that intersect with planning. This includes £75 million allocated to digital health infrastructure, £92 million over two years for digital education tools through the Hwb EdTech programme, and £26 million to improve broadband and digital connectivity. A further £2 million has been directed toward supporting small and medium-sized enterprises (SMEs) in adopting digital tools.

Although Wales does not yet have a dedicated digital planning strategy comparable to those in England or Scotland, it has made some targeted investments to modernise its planning systems. **The 2024-25 Welsh budget allocated £3.7 million towards improving the capabilities and speed of planning decisions as well as**

a focus on the digital transformation of planning services. More information can be found in the RTPI Cymru blog. Planning services are also being integrated into broader digital public service platforms, aligning with the goals of the Digital Strategy for Wales. These developments aim to enhance service delivery and increase public engagement in the planning process yet are **lacking compared to similar digital planning initiatives and funding in England and Scotland which are more targeted to the planning system and planning practice**.

Benchmarking digital planning skills in local authorities

An online survey was distributed to planning practitioners across Wales via RTPI Cymru's e-newsletter and social media channels in March and April of 2025. The survey was intended to develop a benchmark of the current technical capacity of LPAs in Wales, identify barriers to developing digital planning, and explore how digital planning could contribute to positive planning outcomes in Wales. The findings of the survey are summarised below.

Participant demographics and professional background

The survey gathered responses from 57 planning professionals currently working in Wales. The majority of respondents (61%) have over 15 years of experience in the field, indicating a highly experienced cohort. A smaller proportion (20%), however, have less than 5 years of experience, suggesting some caution is needed in interpreting the survey results due to limited representation from early-career professionals. The roles of the participants varied widely, reflecting the diversity of responsibilities within the planning profession. These included Planning Officers, Directors, Principal Planners, Transport Planners, Heritage Planners, and Consultants, among others. The **results, therefore, cover a considerable range of responsibilities and perspectives, from policy development to enforcement and consultancy**.

The vast majority of participants were involved in development management (72%)

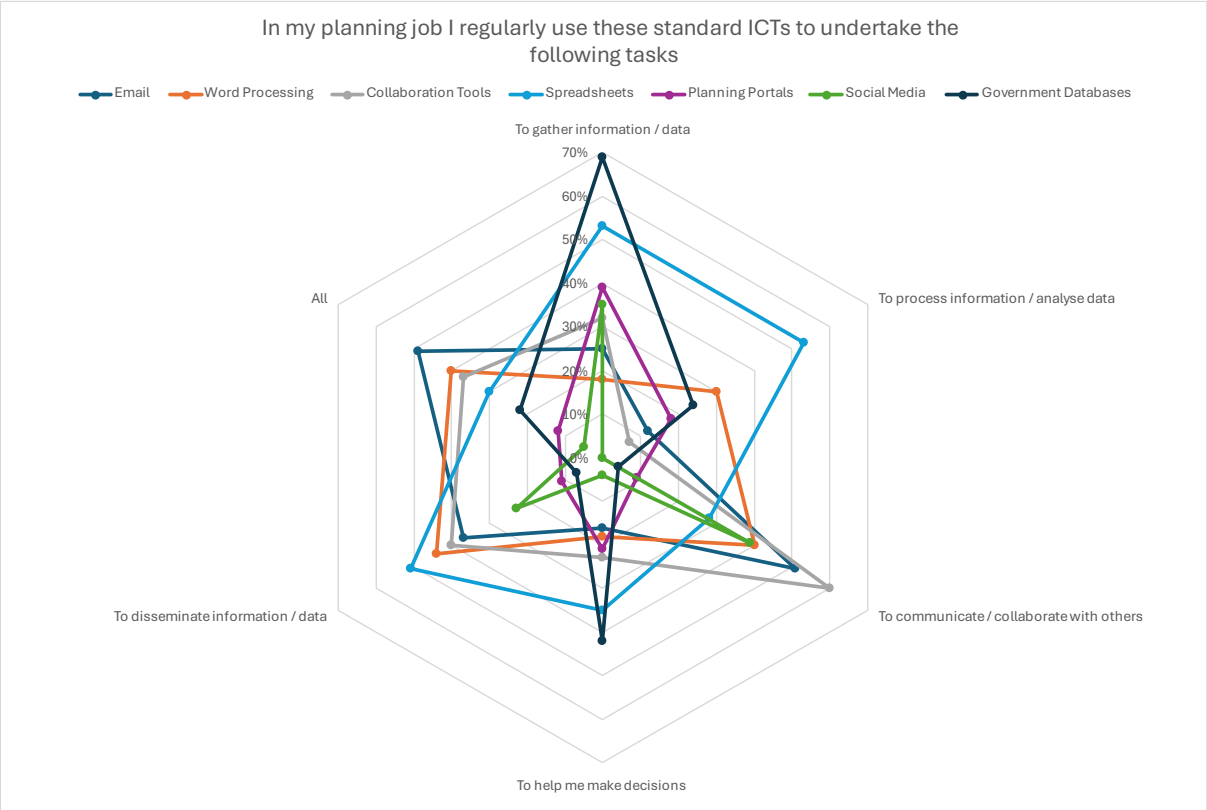
and policy planning (58%). Other areas such as enforcement (28%), housing (28%), and infrastructure planning (16%) were also represented, alongside specialist areas like heritage, environmental planning, and stakeholder engagement. This diversity highlights the multifaceted nature of planning work in Wales. Employment sectors were equally varied. Nearly half of respondents (49%) work for Local Planning Authorities or National Parks, while others are employed in consultancies (33%), government agencies (5%), developers (2%), and educational institutions (2%). A small but notable proportion (9%) identified as working in “Other” sectors, particularly charities.

This participant profile suggests that the survey results are grounded in a wealth of practical experience and institutional knowledge. However, the dominance of senior professionals may also mean that the perspectives of newer entrants to the profession are under-represented. This has implications for understanding digital skills gaps and training needs across different career stages.

Current use of digital tools in planning

The survey reveals a broad and varied use of digital tools among planning professionals in Wales, with both standard and specialist Information Communication Technologies (ICTs) playing a significant role in daily tasks. Standard tools such as email, word processing software (e.g. Microsoft Word), spreadsheets (e.g. Microsoft Excel), and collaboration platforms (e.g. Microsoft Teams, OneDrive) are widely used (Figure 1). These tools support a range of functions including data gathering, analysis, communication, decision-making, and dissemination of information.

Figure 1: This diagram shows which ICT tools planners regularly use for different tasks such as gathering information or analysing data (percentage)



The data in figure 1 shows that:

- 25% of respondents use email to gather information/data, 12% use it to process information and analyse data, 51% to communicate/collaborate with others, 16% to help them make decisions, and 37% to disseminate information/data. 49% of respondents use email for all these purposes;

- 18% of respondents use word processing to gather information/data, 30% use it to process information and analyse data, 40% to communicate/collaborate with others, 18% to help them make decisions and 44% to disseminate information/data. 40% of respondents use word processing for all these purposes;

- 32% of respondents use collaboration tools to gather information/data, 7% use

it to process information and analyse data, 60% to communicate/collaborate with others, 23% to help them make decisions and 40% to disseminate information/data. 37% of respondents use collaboration tools for all these purposes;

- 53% of respondents use spreadsheets to gather information/data, 53% use it to process information and analyse data, 28% to communicate/collaborate with others, 35% to help them make decisions and 51% to disseminate information/data. 30% of respondents use spreadsheets for all these purposes;

- 39% of respondents use planning portals to gather information/data, 18% use it to process information and analyse data, 9% to communicate/collaborate with others, 21% to help them make decisions and 11% to disseminate information/data. 12% of respondents use planning portals for all these purposes;

- 35% of respondents use social media to gather information/data, 39% to communicate/collaborate with others, 4% to help them make decisions and 23% to disseminate information/data. 5% of respondents use social media for all these purposes. No respondents use social media to process information and analyse data;

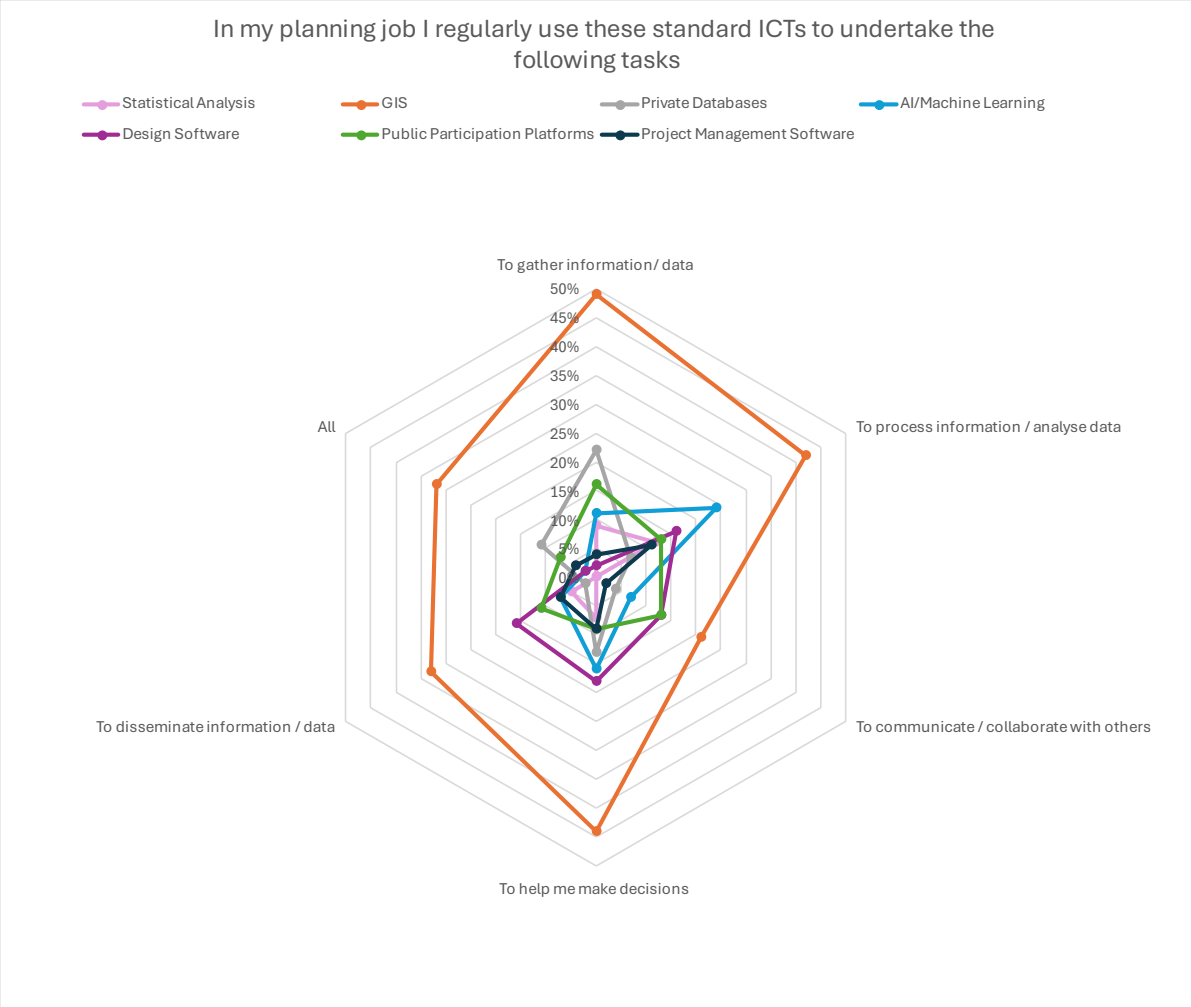
- 69% of respondents use Government databases to gather information/data, 24% to process information and analyse data, 4% to communicate/collaborate with others, 42% to help them make decisions and 7% to disseminate information/data. 22% of respondents use Government databases for all these purposes.

Email remains the most universally used tool, with 100% of respondents indicating its use, primarily for communication and information dissemination. Word processing and spreadsheets are also heavily relied upon, particularly for data processing and analysis. **Collaboration tools are used by over half of respondents, reflecting**

the increasing importance of remote and team-based work environments. Interestingly, many standard digital tools are not used to help planners to make decisions or (except for spreadsheets) process information/analyse data.

Specialist ICTs show more varied adoption (Figure 2). Geographic Information Systems (GIS) are among the most used specialist tools, with significant application in data analysis and decision-making. Planning portals (e.g. Planning Portal Wales or LPA specific portals) are also widely used, particularly for accessing and disseminating planning information. However, more advanced tools such as AI/machine learning, data visualisation platforms (e.g. Tableau), and public participation platforms (e.g. Commonplace) are used less frequently, suggesting either limited access or lower familiarity among professionals.

Figure 2: This diagram shows how regularly planners use different planning-based



ICTs such as GIS and design software for different purposes such as data usage, decision making and collaboration (percentage)

The data in figure 2 shows that:

- 9% of respondents use statistical analysis ICTs to gather information/data, 12% use it to process information and analyse data, 7% to help them make decisions and 5% to disseminate information/data. No respondents use statistical analysis ICTs to communicate/collaborate with others;

- 49% of respondents use GIS to gather information/data, 42% use it to process information and analyse data, 21% to communicate/collaborate with others, 44% to help them make decisions and 33% to disseminate information/data. 32% of respondents use GIS for all these purposes;

- 22% of respondents use private databases to gather information/data, 7% use it to process information and analyse data, 4% to communicate/collaborate with others, 13% to help them make decisions and 2% to disseminate information/data. 11% of respondents use private databases for all these purposes;

- 11% of respondents use AI/machine learning to gather information/data, 24% use it to process information and analyse data, 7% to communicate/collaborate with others, 16% to help them make decisions and 7% to disseminate information/data. 2% of respondents use AI/machine learning for all these purposes;

- 2% of respondents use design software to gather information/data, 16% use it to process information and analyse data, 13% to communicate/collaborate with others, 18% to help them make decisions and 16% to disseminate information/data. 2% of respondents use design software for all these purposes;

- 16% of respondents use public participation platform tools to gather information/data, 13% use it to process information and analyse data, 13% to communicate/collaborate with others, 9% to help them make decisions and 11% to disseminate information/data. 7% of respondents use public participation platforms for all these purposes;

- 4% of respondents use project management software to gather information/data, 11% use it to process information and analyse data, 2% to communicate/collaborate with others, 9% to help them make decisions and 7% to disseminate information/data. 4% of respondents use project management software for all these purposes.

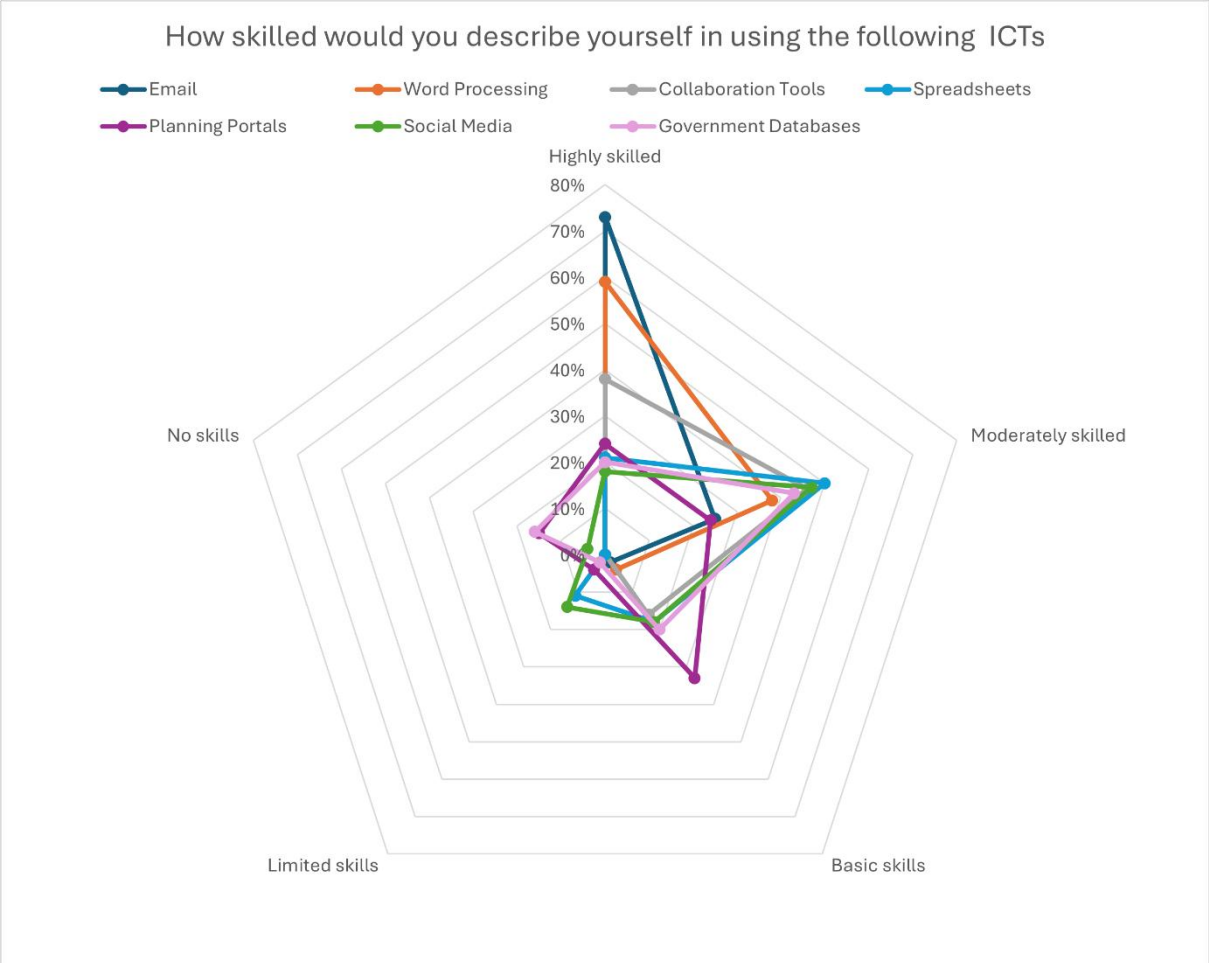
Interestingly, several respondents noted the use of niche or bespoke tools, such as junction modelling software, SQL-based data management systems, and webinar platforms. This indicates a degree of innovation and customisation in digital tool usage, particularly among consultants and specialists.

While foundational digital tools are well-integrated into planning workflows, there is uneven adoption of more advanced or emerging technologies. This may reflect differences in organisational capacity, individual expertise, or the perceived relevance of certain tools to specific planning tasks. The findings highlight a strong baseline of digital engagement but also point to **opportunities for expanding the use of more sophisticated technologies to enhance planning outcomes and improve the use of digital tools to help planners make decisions**

Digital skills and competency levels

The survey responses indicate a generally high level of digital competency among planning professionals in Wales, particularly with standard ICT tools (Figure 3). A significant majority of respondents rated themselves as either “highly skilled” or “moderately skilled” in using email (98%), word processing (97%), and collaboration tools (84%). These results suggest that the **foundational digital skills necessary for modern planning work are well established across the profession in Wales**.

Figure 3: This diagram shows the level of skill planners say they have in using various general ICTs such as spreadsheets or email (percentage)



The data in figure 3 shows that:

- 73% of respondents described themselves as highly skilled at using email, 25% as moderately skilled, and the remaining 2% as having basic skills. No-one described themselves as having limited or no skills;

- 59% of respondents described themselves as highly skilled at using word processing, 38% as moderately skilled, and the remaining 4% as having basic skills. No-one described themselves as having limited or no skills;

- 38% of respondents described themselves as highly skilled at using

collaboration tools, 46% as moderately skilled, and the remaining 16% as having basic skills. No-one described themselves as having limited or no skills;

- 21% of respondents described themselves as highly skilled at using spreadsheets, 50% as moderately skilled, 18% as having basic skills, and 11% as having limited skills. No-one described themselves as having no skills;

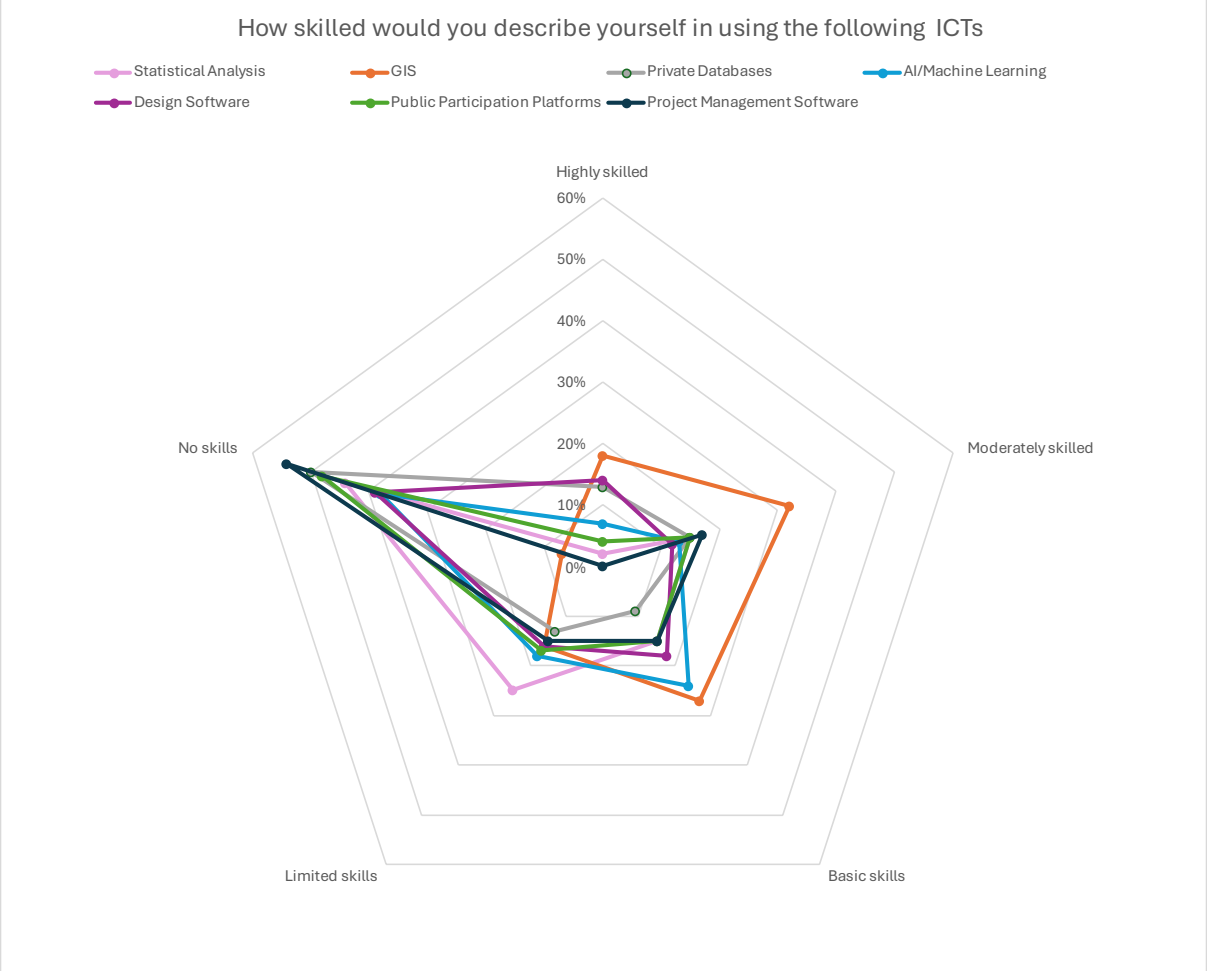
- 24% of respondents described themselves as highly skilled at using planning portals, 24% as moderately skilled, 33% as having basic skills, 4% as having limited skills and 15% as having no skills;

- 18% of respondents described themselves as highly skilled at using social media, 47% as moderately skilled, 18% as having basic skills, 14% as having limited skills and 4% as having no skills;

- 20% of respondents described themselves as highly skilled at using Government databases, 43% as moderately skilled, 20% as having basic skills, 2% as having limited skills and 16% as having no skills.

Spreadsheets, while still widely used, show a slightly lower level of confidence, with respondents rating themselves as highly (21%) or moderately skilled (50%). This may reflect the more technical nature of spreadsheet functions, particularly for data analysis tasks. **Statistical analysis software (e.g. SPSS) and GIS tools show a broader range of skill levels** (Figure 4). For example, only 18% of respondents consider themselves highly skilled in GIS, while 43% report only basic or limited skills. This suggests that such tools are either less essential in day-to-day roles or that there is a need for targeted training in these more specialised areas to expand their use.

Figure 4: This diagram shows the level of skill planners say they have in using various planning-based ICTs such as GIS and design software (percentage)



The data in figure 4 shows that:

- in terms of statistical analysis, 2% of respondents described themselves as highly skilled, 15% as moderately skilled, 15% as having basic skills, 25% as having limited skills and 44% as having no skills at all;

- in terms of GIS, 18% of respondents described themselves as highly skilled, 32% as moderately skilled, 27% as having basic skills, 16% as having limited skills and 7% as having no skills at all;

- in terms of private databases, 13% of respondents described themselves as highly skilled, 15% as moderately skilled, 9% as having basic skills, 13% as having limited skills and 50% as having no skills at all;

- in terms of AI/machine learning, 7% of respondents described themselves as highly skilled, 13% as moderately skilled, 24% as having basic skills, 18% as having limited skills and 38% as having no skills at all;

- in terms of design software, 14% of respondents described themselves as highly skilled, 12% as moderately skilled, 18% as having basic skills, 16% as having limited skills and 39% as having no skills at all;

- in terms of public participation platforms, 4% of respondents described themselves as highly skilled, 15% as moderately skilled, 15% as having basic skills, 17% as having limited skills and 48% as having no skills at all;

- in terms of project management software, no respondents described themselves as highly skilled, 17% described themselves as moderately skilled, 15% as having basic skills, 15% as having limited skills and 54% as having no skills at all.

When it comes to even more specialist ICTs, the skills gap becomes more pronounced. **Tools such as AI/machine learning, design software (e.g. CAD, SketchUp), and public participation platforms are areas where many respondents report limited or no skills**. For instance, 56% of respondents indicated limited or no skills in AI/machine learning, and 55% reported similar levels for design software, while 48% reported no skills in the use of public participation platforms. This highlights a significant opportunity for professional development, particularly following government initiatives to expand the use of such tools in planning practice, especially AI/machine learning and public participation platforms.

While the profession demonstrates strong competency in core digital tools, **there is a clear need to build capacity in more advanced and specialised technologies**.

Addressing these gaps through targeted training, peer learning, and institutional support will be essential to fully realise the benefits of digital planning and ensure government initiatives are successful.

Digital infrastructure and data management

The survey reveals a mixed landscape in terms of how planning information is stored and accessed across organisations in Wales. While there is a clear trend towards digitisation, many respondents highlighted the **persistence of hybrid systems that combine both digital and paper-based records**. This duality reflects both progress and ongoing challenges in digital infrastructure.

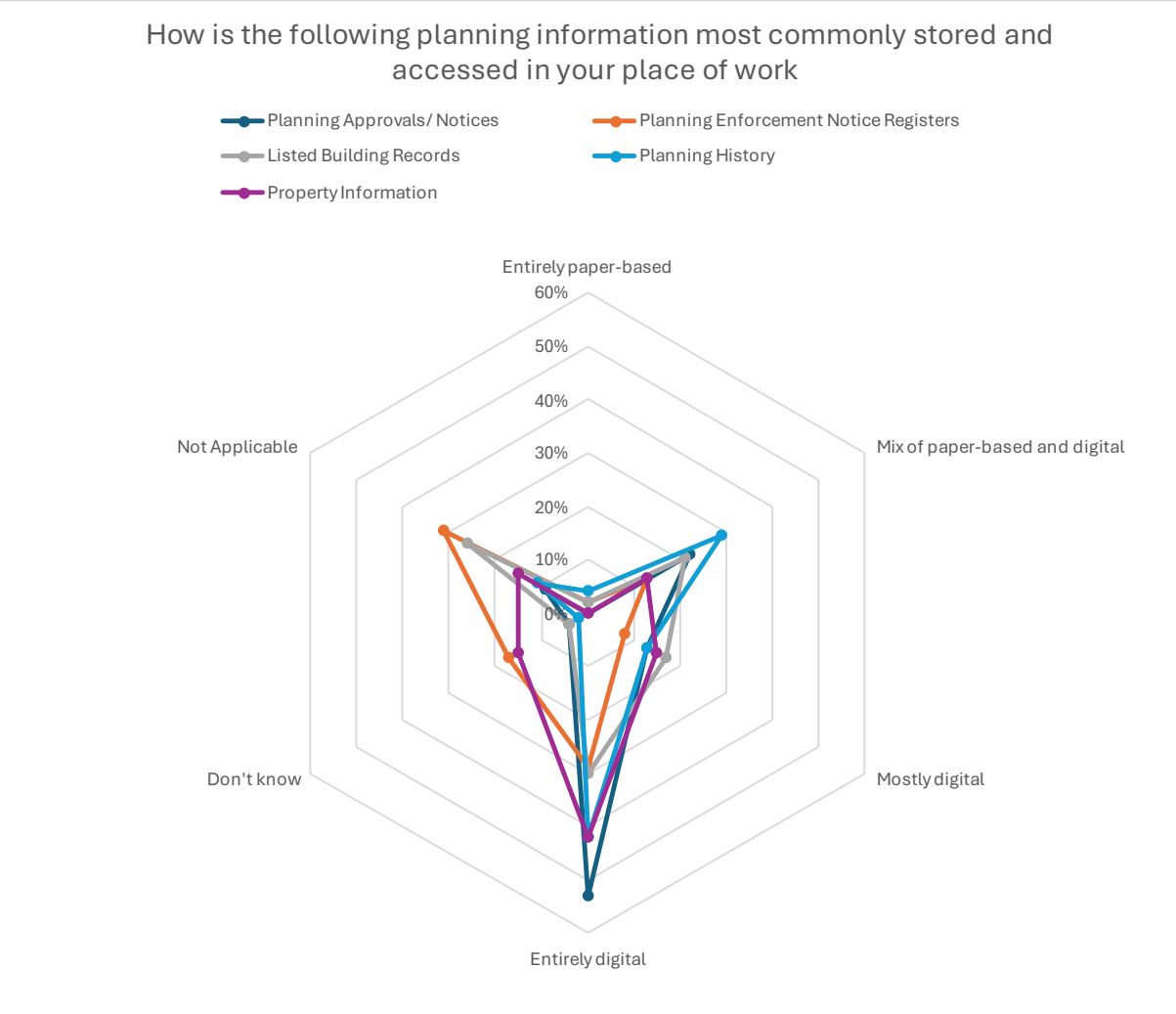
Planners said they use….MasterGov (by Def Software)

- Software suite used by local authorities to manage planning, building control, land charges, highways, and related regulatory processes.
- Modular, cloud-based system with integrated GIS, document management, and workflow automation tools.
- Local authorities use MasterGov to handle the full lifecycle of planning applications - from submission and validation to decision, appeals, and enforcement. It supports tasks like calculating fees, managing S106 agreements, and reporting on biodiversity net gain.

For core planning documents such as planning approvals, enforcement notices, and listed building records, a majority of respondents indicated that these are “mostly digital” or “entirely digital” (Figure 5). However, a **significant proportion still reported using a “mix of paper-based and digital” systems, particularly for historical records** (Figure 6). For example, planning history and property

information are often digitised only from a certain year onwards, with older records remaining in paper or microfiche formats. Participants noted that the digitisation of planning records began at different times depending on the LPA. One participant mentioned that all records from 1984 onwards had been digitised, while another indicated that digitisation only started with records from 1998. This can create inefficiencies and inconsistencies in data access and retrieval.

Figure 5: This diagram is the first of three graphs showing how different types of planning information are stored and accessed at work in different formats including paper based and digital (percentage)



The data in figure 5 shows that:

- in terms of planning approvals/notices, 53% of respondents store and access this data entirely digitally, 13% mostly digitally, 22% use a mix of paper and digital. None are wholly paper-based. A further 4% of respondents did not know, and the remaining 9% said this document type was not relevant to them;

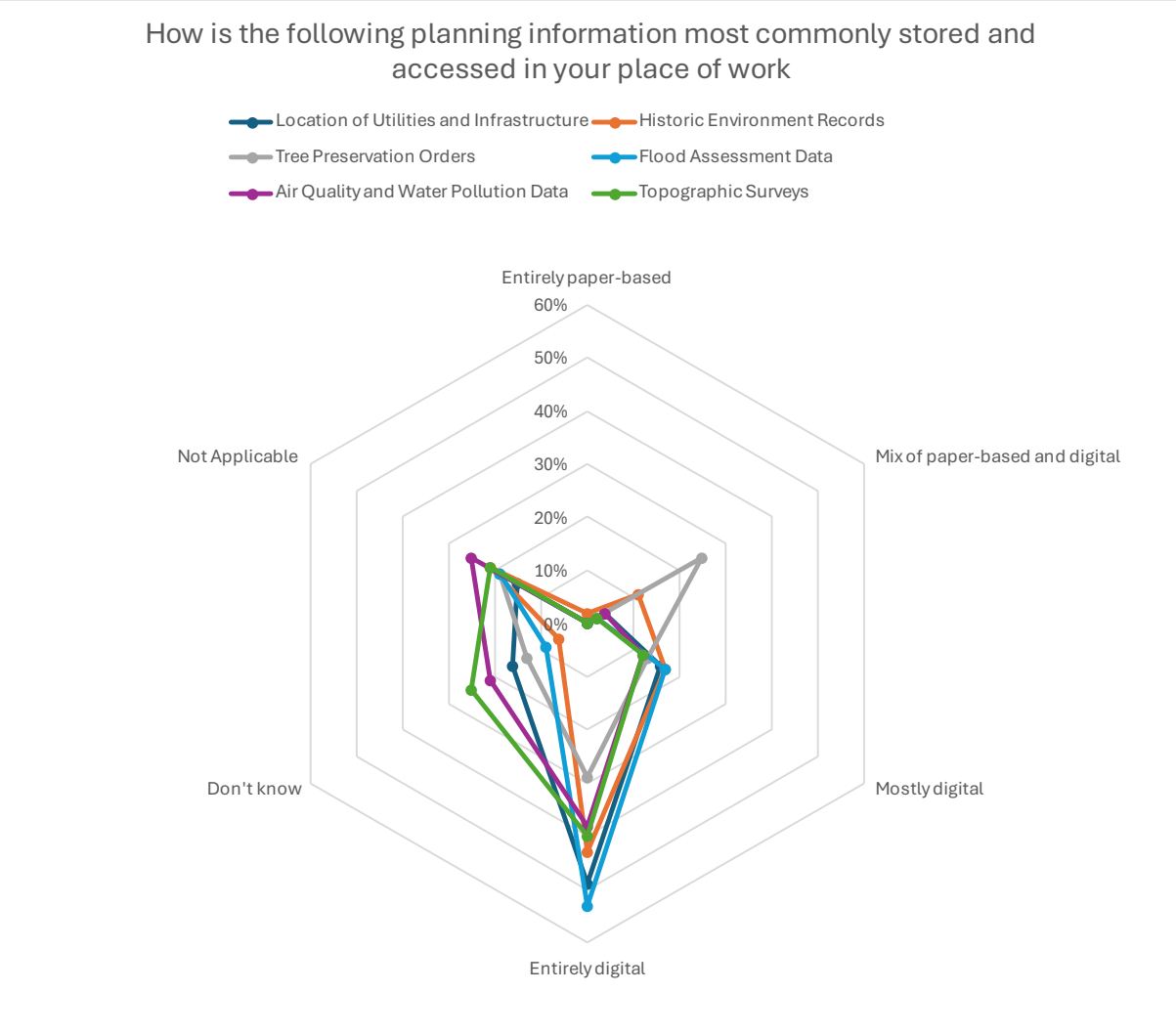
- in terms of planning enforcement notice registers, 29% of respondents store and access this data entirely digitally, 8% mostly digitally, 13% use a mix of paper and digital and 2% are wholly paper-based. A further 17% of respondents did not know, and the remaining 31% said this document type was not relevant to them;

- in terms of Listed Building records, 30% of respondents store and access this data entirely digitally, 17% mostly digitally, 21% use a mix of paper and digital, and 2% are wholly paper-based. A further 4% of respondents did not know, and the remaining 26% said this document type was not relevant to them;

- in terms of planning history, 42% of respondents store and access this data entirely digitally, 13% mostly digitally, 29% use a mix of paper and digital, and 4% are wholly paper-based. A further 2% of respondents did not know, and the remaining 11% said this document type was not relevant to them;

- in terms of property information, 42% of respondents store and access this data entirely digitally, 15% mostly digitally, and 13% use a mix of paper and digital. None are wholly paper-based. A further 15% of respondents did not know, and the remaining 15% said this document type was not relevant to them.

Figure 6: This diagram is the second of three graphs showing how different types of planning information are stored and accessed at work in different formats including paper based and digital (percentage)



The data in figure 6 shows that:

- 2% of respondents have entirely paper-based historic environment records. No other document is entirely paper-based;

- in terms of the location of utilities and infrrastructure, 49% of respondents store and access this data entirely digitally, 16% mostly digitally, and 4% use a mix of paper and digital. A further 16% of respondents did not know, and the remaining 15% said this document type was not relevant to them;

- in terms of historic environmental records, 43% of respondents store and access this data entirely digitally, 17% mostly digitally, 11% use a mix of paper

and digital and 2% are wholly paper-based. A further 6% of respondents did not know, and the remaining 21% said this document type was not relevant to them;

- in terms of tree preservation orders, 29% of respondents store and access this data entirely digitally, 13% mostly digitally, and 25% use a mix of paper and digital. A further 13% of respondents did not know, and the remaining 19% said this document type was not relevant to them;

- in terms of flood assessment data, 53% of respondents store and access this data entirely digitally, 17% mostly digitally, and 2% use a mix of paper and digital. A further 9% of respondents did not know, and the remaining 19% said this document type was not relevant to them;

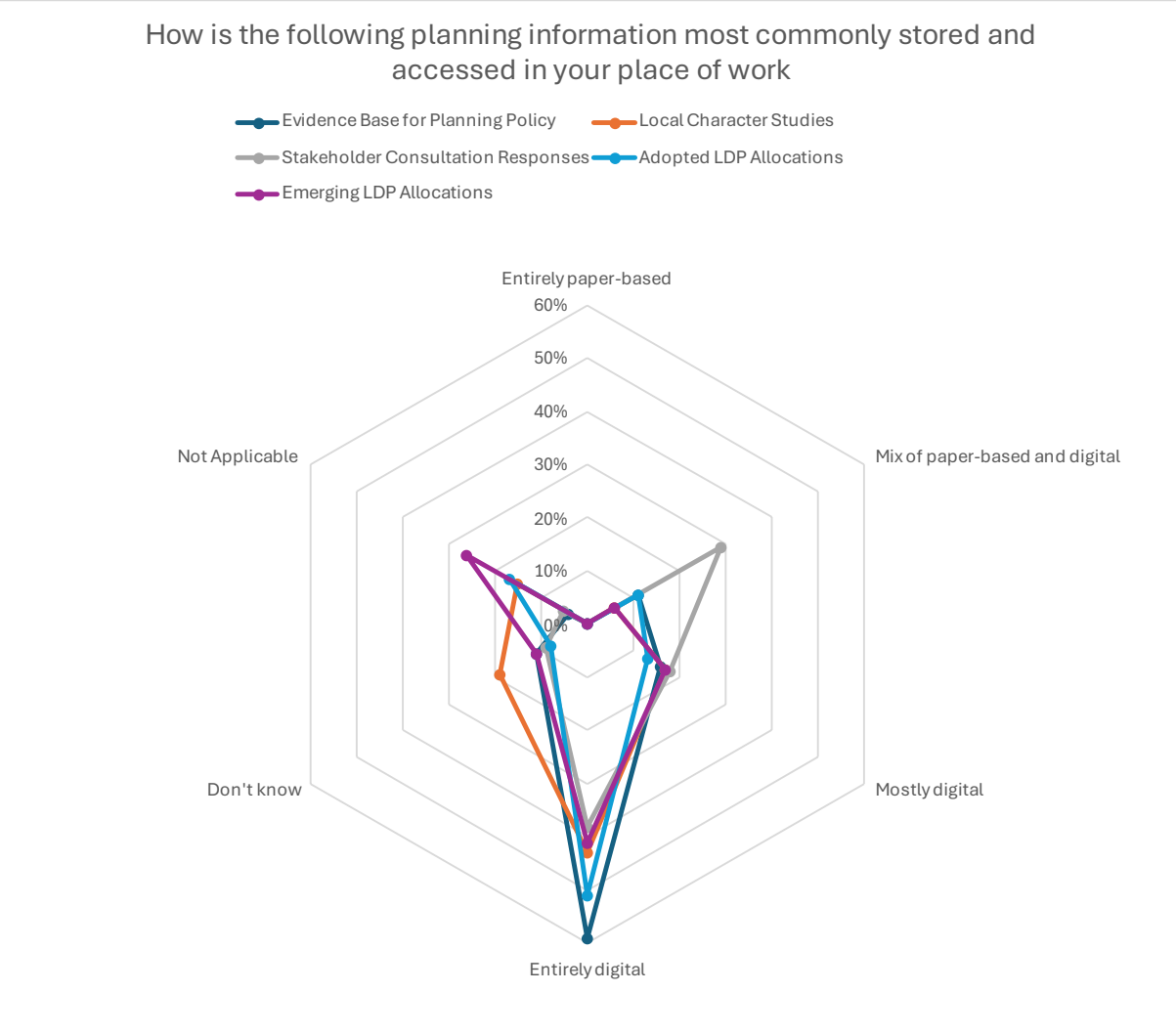
- in terms of air quality and water pollution data, 38% of respondents store and access this data entirely digitally, 12% mostly digitally, and 4% use a mix of paper and digital. A further 21% of respondents did not know, and the remaining 25% said this document type was not relevant to them;

- in terms of topographic surveys, 40% of respondents store and access this data entirely digitally, 12% mostly digitally, and 2% use a mix of paper and digital. A further 25% of respondents did not know, and the remaining 21% said this document type was not relevant to them.

Respondents also noted that while modern planning applications are typically stored electronically, legacy files and archives such as historical Section 106 agreements or even the adopted LDP still rely heavily on physical storage (Figure 7). Several comments highlighted the **logistical challenges of digitising older records, including the need for redaction, scanning, and manual uploading, as well sometimes poor-quality digitised files**. These processes are time-consuming and resource-intensive, often requiring specialised equipment and staff time to access and resolve as noted by a survey participant:

“Scanned digital records of the vast majority of planning files are available from approx. 1998 onwards to staff. To be made publicly available, these require page by page redaction and uploading to the public portal. Historic files pre-dating approx., 1998 are held in archives and require transportation across the county to a scanner of the correct size, page by page copying, digital upload, redaction, and return of the files to archives (!)”

Figure 7: This diagram is the third of three graphs showing how different types of planning information are stored and accessed at work in different formats including paper based and digital (percentage)



The data in figure 7 shows that:

- no respondent has entirely paper-based LDP documents;

- in terms of the planning policy evidence base, 59% of respondents store and access this data entirely digitally, 16% mostly digitally, and 11% use a mix of paper and digital. A further 11% of respondents did not know, and the remaining 4% said this document type was not relevant to them;

- in terms of local character studies, 43% of respondents store and access this data entirely digitally, 17% mostly digitally, and 6% use a mix of paper and digital. A further 19% of respondents did not know, and the remaining 15% said this document type was not relevant to them;

- in terms of stakeholder consultation responses, 38% of respondents store and access this data entirely digitally, 18% mostly digitally, and 29% use a mix of paper and digital. A further 9% of respondents did not know, and the remaining 5% said this document type was not relevant to them;

- in terms of adopted LDP allocations, 51% of respondents store and access this data entirely digitally, 13% mostly digitally, and 11% use a mix of paper and digital. A further 8% of respondents did not know, and the remaining 17% said this document type was not relevant to them;

- in terms of emerging LDP allocations, 41% of respondents store and access this data entirely digitally, 17% mostly digitally, and 6% use a mix of paper and digital. A further 11% of respondents did not know, and the remaining 26% said this document type was not relevant to them.

The quality and accessibility of digital records also vary. Some respondents expressed concerns about the legibility of scanned documents, and one noted the lack of optical character recognition (OCR) capabilities, which limits the usability of digitised content. The same respondent pointed to inconsistencies in data

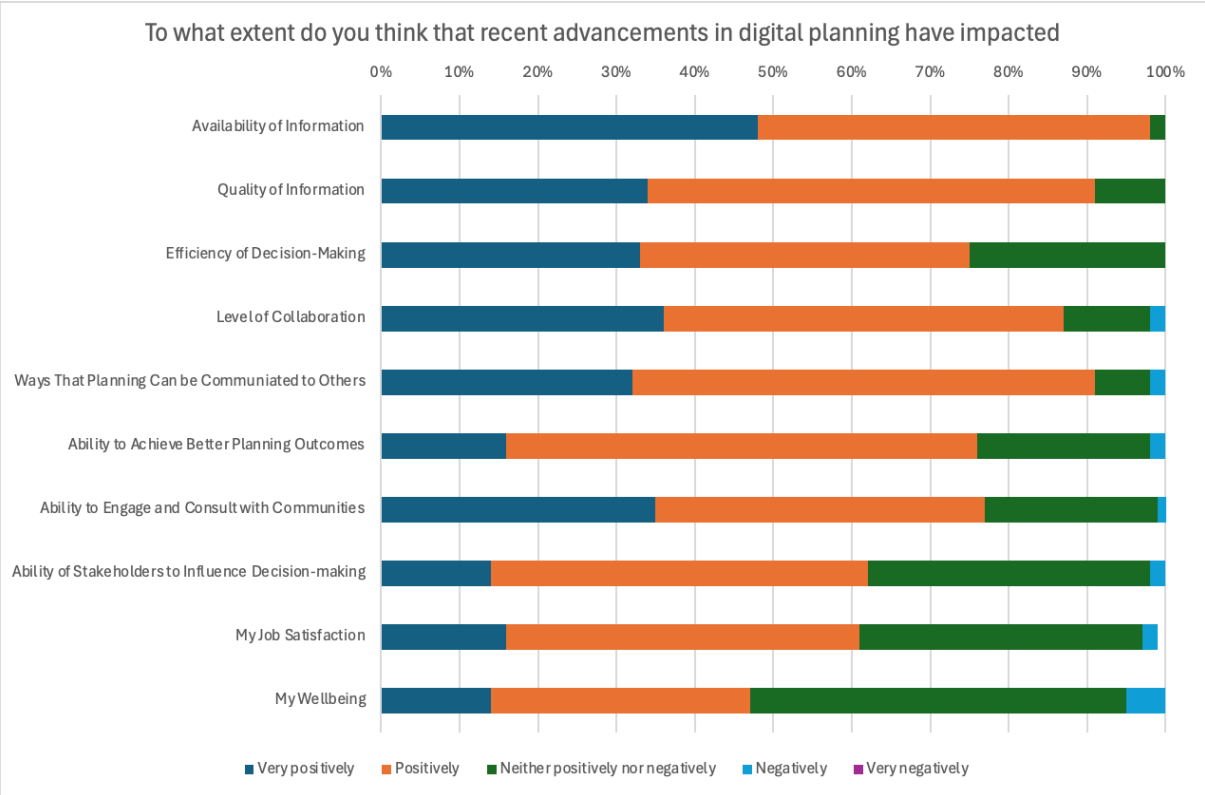
governance across local authorities and the absence of integrated geospatial data within planning policies, such as LDPs, which hampers later spatial analysis, evaluation, and options for innovative stakeholder engagement. A private sector respondent highlighted **the importance of real-time access to data** as they do not store their own historical files but may need to access historical information to take forward a planning application.

Despite these challenges, there is a clear recognition of the benefits of digital systems. Respondents acknowledged that digitisation improves efficiency, transparency, and collaboration. However, they also emphasised the need for standardised systems and better coordination across local authorities to ensure consistency and interoperability.

Perceptions of digital planning

Survey respondents generally **view digital planning as a positive force within the profession**, particularly in terms of improving access to information, enhancing collaboration, and increasing the efficiency of planning processes (Figure 8). A large majority reported that **digital advancements have positively or very positively impacted the availability (98%) and quality (91%) of planning data**. These improvements are seen as foundational to better decision-making and more transparent planning outcomes.

Figure 8: This diagram shows to what extent planners think advancements in digital planning have impacted various aspects of their role such as quality of information, engagement ability or job satisfaction and wellbeing (percentage)



The data in figure 8 shows that:

- 48% of planners think recent advancements in digital planning have had a very positive impact on the availability of information, 50% think it has had a positive impact and the remaining 2% think it has had a neutral impact;

- 34% of planners think recent advancements in digital planning have had a very positive impact on the quality of information, 57% think it has had a positive impact and the remaining 9% think it has had a neutral impact;

- 33% of planners think recent advancements in digital planning have had a very positive impact on the efficiency of decision-making, 52% think it has had a positive impact and the remaining 25% think it has had a neutral impact;

- 36% of planners think recent advancements in digital planning have had a very positive impact on their level of collaboration, 51% think it has had a positive impact, 11% think it has had a neutral impact and the remaining 2% think it has had a negative impact;

- 32% of planners think recent advancements in digital planning have had a very positive impact on ways that panning can be communicated to others, 59% think it has had a positive impact, 7% think it has had a neutral impact, and the remaining 2% think it has had a negative impact;

- 16% of planners think recent advancements in digital planning have had a very positive impact on their ability to achieve better planning outcomes, 60% think it has had a positive impact, 22% think it has had a neutral impact, and the remaining 2% think it has had a negative impact;

- 35% of planners think recent advancements in digital planning have had a very positive impact on their ability to engage and consult with communities, 42% think it has had a positive impact, 22% think it has had a neutral impact, and the remaining 1% think it has had a negative impact;

- 14% of planners think recent advancements in digital planning have had a very positive impact on the ability of stakeholders to influence decision-making of information, 48% think it has had a positive impact, 36% were neutral and the remaining 2% think it has had a negative impact;

- 16% of planners think recent advancements in digital planning have had a very positive impact on their job satisfaction, 46% think it has had a positive impact, 35% think it had a neutral impact and the remaining 3% think it has had a negative impact;

- 14% of planners think recent advancements in digital planning have had a very positive impact on their wellbeing, 33% think it has had a positive impact, 48% are neutral and the remaining 5% think it has had a negative impact.

Efficiency gains were also widely acknowledged. Over 75% of respondents indicated that digital tools have improved the speed and effectiveness of decision-making. Similarly, collaboration, both within teams and with external stakeholders, was seen to benefit significantly from digital platforms, with 88% reporting positive impacts. Tools such as shared drives, planning portals, and virtual meeting platforms have enabled more seamless communication and coordination.

However, the impact on job satisfaction and wellbeing was more nuanced. While some respondents appreciated the flexibility and productivity gains offered by digital tools, others expressed **concerns about increased workloads, constant digital availability, and the erosion of work-life boundaries**. Several noted that the expectation to be perpetually online and responsive can lead to burnout and stress, particularly in under-resourced teams, including one respondent who noted:

> "Digital tools have had a positive impact on access to data, but the negative is widespread misinformation which creates extra work, distrust and confusion. Getting things done more easily is beneficial to my wellbeing but online abuse and the feeling of never being logged off from work is detrimental to wellbeing."

The ability of digital tools to enhance public engagement and stakeholder influence was also seen as a double-edged sword. **While many acknowledged that online platforms have broadened participation and made consultations more accessible, others warned of the risks of misinformation, superficial engagement, and amplification of negative campaigns via social media.** These dynamics can complicate planning processes and undermine constructive dialogue.

Planners said they use….Virtual Engage (by ARUP)

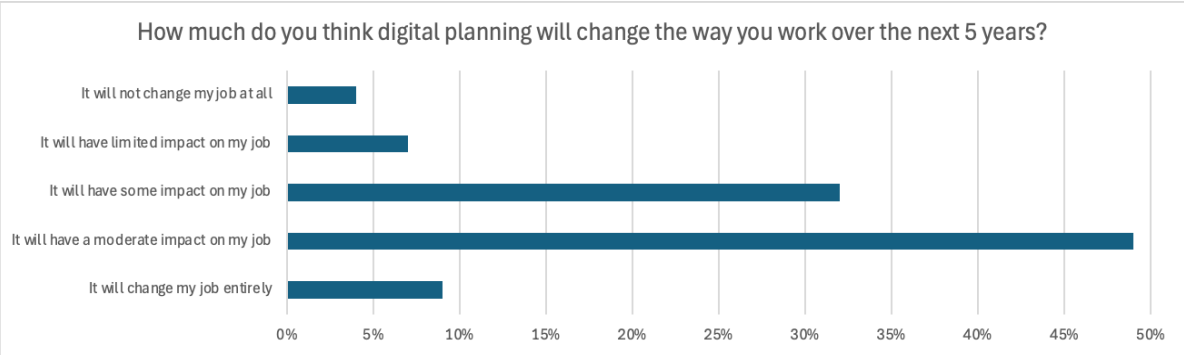
- Web-based platform for delivering interactive public consultations and exhibitions, often used in infrastructure and planning projects.

- Customisable virtual environments that include maps, 3D models, videos, and feedback tools, accessible from any device.

- Local authorities and infrastructure teams use Virtual Engage to reach wider audiences, reduce the need for physical events, and gather structured feedback. It supports features like live chat with experts, comment portals, and data capture for reporting.

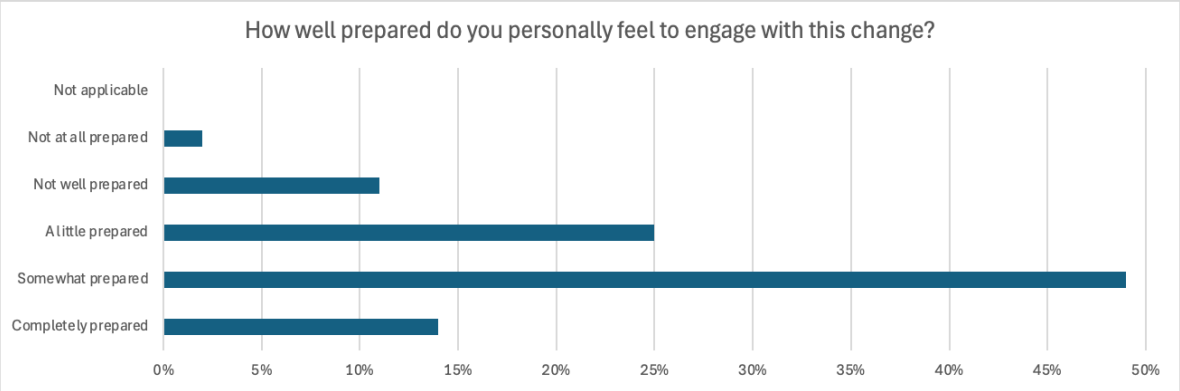
Looking ahead, most respondents (49%) expect digital planning to have a moderate to significant impact on their work over the next five years, followed by 'some impact' (32%) (Figure 9). However, only a minority feel that they are completely prepared for this shift (14%), slightly lower than their assessment of their organisation (18%) (Figures 10 & 11). This gap between anticipated change and institutional readiness underscores the need for strategic planning, investment, and capacity building.

Figure 9: This diagram shows to what extent planners think that digital planning will change the way they work over the next five years (percentage)



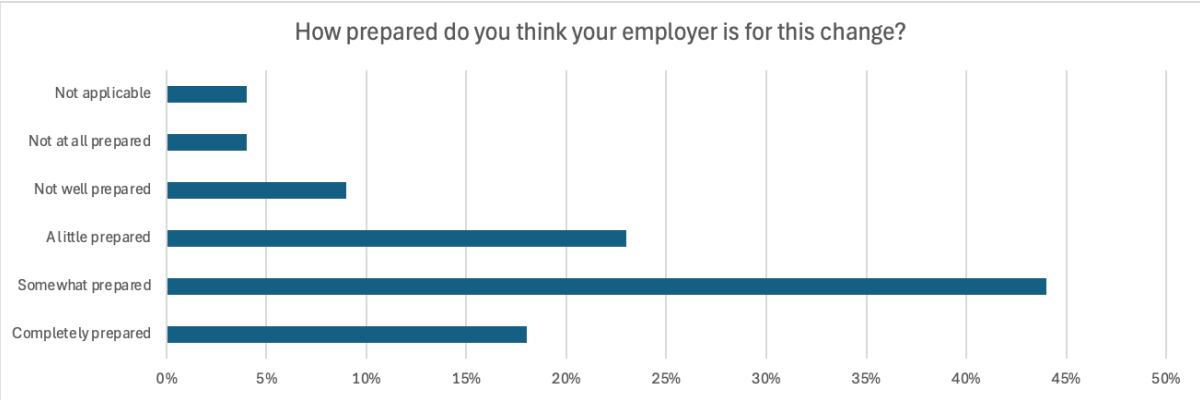
The data in figure 9 shows that 4% of planners thought that digital planning will not change the way they work over the next five years, 7% thought it will have a limited impact on their job, 32% thought it will have some impact on their job, 48% thought it will have a moderate impact and 9% thought digital planning will completely change their job entirely over the next five years.

Figure 10: This diagram shows to what extent planners feel prepared to engage with digital planning in their roles (percentage)



The data in figure 10 shows that 2% of planners said that they personally do not feel at all prepared to engage with this change, 11% felt that they were not well prepared, 25% felt a little prepared, 48% felt felt somewhat prepared and 14% felt completely prepared.

Figure 11: This diagram shows to what extent planners think their employer is prepared for digital planning changes (percentage)

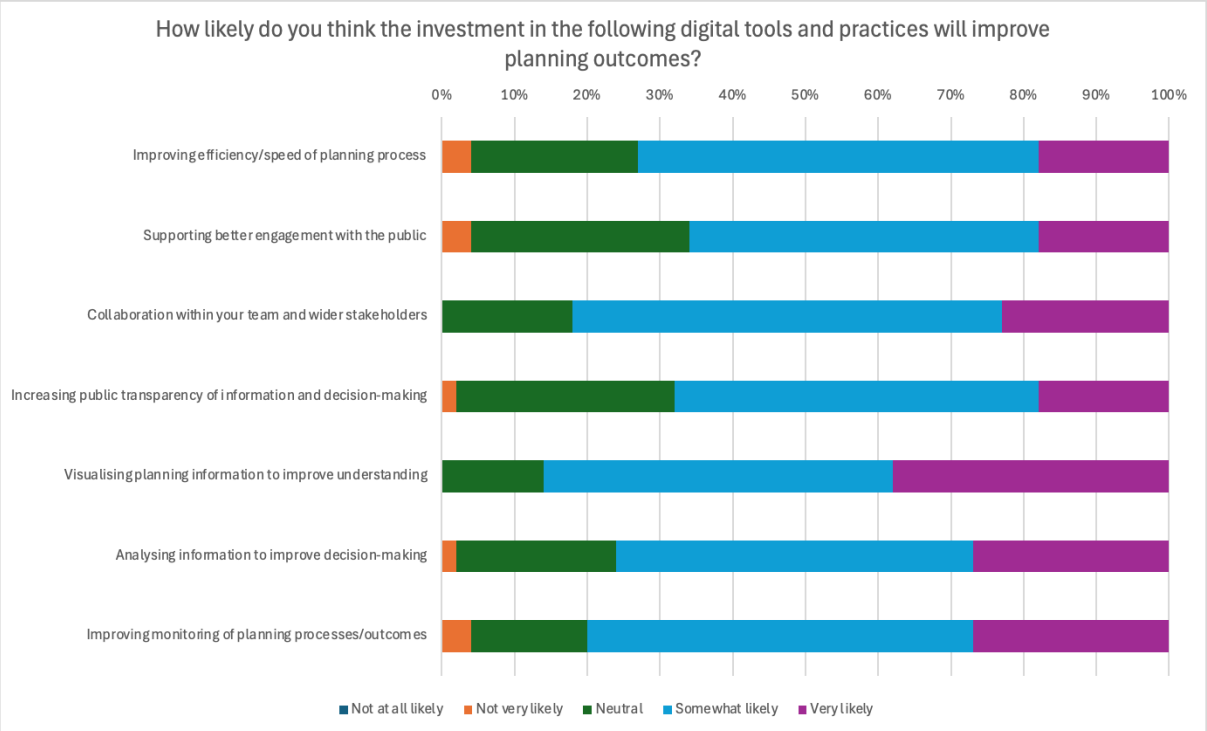


The data in figure 11 shows that 4% of planners thought their employer is not at all prepared for digital planning changes, 9% thought their employer is not well-prepared, 26% thought their employer is a little prepared, 48% thought their employer is somewhat prepared and 16% thought their employer is completely prepared. Four

percent thought this question wasn't applicable.

In relation to the role of digital planning in improving planning outcomes, the survey indicates a broadly positive perception among respondents (Figure 12). **Most respondents believe that investments in digital tools are likely to enhance various aspects of the planning process.** Specifically, a strong majority see improvements in collaboration within teams and with stakeholders, with 82% rating this as somewhat or very likely. Similarly, 86% believe that new forms of visualizing planning information will improve understanding, and 81% think digital tools will enhance monitoring of planning processes and outcomes.

Figure 12: This diagram shows to what extent planners believe digital tools will improve planning outcomes (percentage)



The data in figure 12 shows that:

- 18% of planners think it is very likely that digital tools and practices will improve the efficiency or speed of planning processes, 55% think it is

somewhat likely, 23% are neutral and 4% think it is not very likely;

- 18% of planners think it is very likely that digital tools and practices will support better engagement with the public, 48% think it is somewhat likely, 30% are neutral and 4% think it is not very likely;

- 23% of planners think it is very likely that digital tools and practices will support collaborations with their team and with wider stakeholders, 59% think it is somewhat likely and the remaining 18% are neutral;

- 18% of planners think it is very likely that digital tools and practices will increase transparency of planning information and decision-making, 50% think it is somewhat likely, 30% are neutral and 2% think it is not very likely;

- 38% of planners think it is very likely that digital tools and practices will help with the visualisation of planning information to improve understanding, 48% think it is somewhat likely, and the remaining 14% are neutral;

- 27% think it is very likely that digital tools and practices will support the analysis of information to improve decision-making, 50% think it is somewhat likely, 21% are neutral and 2% think it is not very likely;

- 28% of planners think it is very likely that digital tools and practices will improve monitoring of planning processes or outcomes, 52% think it is somewhat likely, 16% are neutral and 4% think it is not very likely.

Investments in tools aimed at improving efficiency and speed, supporting public engagement, increasing transparency, and enhancing decision-making through data analysis also received favourable responses, with support ranging from 66% to 76%. While some areas, such as public engagement and transparency, had a higher proportion of neutral responses, the overall sentiment of participants reflects confidence in the potential of digital planning to drive better outcomes.

Barriers, support needs, and future outlook

The survey responses provide a detailed picture of the challenges and opportunities facing the adoption of digital planning tools in Wales. **A recurring theme is the barrier of cost, with many respondents citing limited financial resources as a major constraint.** This includes both the upfront investment required for new software and the ongoing costs associated with subscriptions, training, and system maintenance as explained by a survey participant:

> "Tools require capital investment and it is challenging to move to a model of income allocation per project where fees on projects contribute to a fund to pay for centralised tools. This does not resolve the up-front investment needed."

Organisational capacity is another significant concern. Respondents highlighted issues such as outdated ICT infrastructure, lack of dedicated digital planning staff, and the complexity of procurement processes. In smaller authorities or organisations, these challenges are often compounded by limited staff time and competing priorities. **Even where digital tools are available, there is often insufficient time or support to use them effectively** as argued by one survey respondent:

> "This is a small Authority that has limited funds for digital tools/subscriptions etc; Lack of any specific staff member that is responsible for digital tools/systems; Lack of vision and innovation by management."

Perhaps due to organisational capacity, the survey reveals that **a significant portion of digital planning activities, such as data visualisation, public engagement tools, and data analysis, are being outsourced to external organisations**, with each of these categories selected by around a third of respondents. Despite this outsourcing, there is a growing recognition of digital planning within the sector. Nearly 50% of respondents observed an increase in the use of digital tools by private sector companies over the past two years, and a similar trend was noted for LPAs, though to a slightly lesser extent. When it comes to preparedness, **73% of**

respondents believe private sector companies are at least somewhat prepared to engage with digital planning tools, compared to 52% who feel the same about LPAs. However, a notable proportion expressed concerns about LPAs' readiness, with 27% indicating they are not particularly or not at all prepared.

Skills and training gaps were frequently mentioned. While many professionals are confident with standard ICT tools, **there is a clear need for more structured training in advanced technologies** such as GIS, AI, and data visualisation. Respondents expressed a strong desire for training opportunities (81%), peer learning (93%), and exposure to new tools (91%) but often opportunities are not available due to a lack of skilled staff as noted by a survey respondent:

> "Need for individuals who are highly skilled in this sort of technology to be able to pass on information to other employees taking on that role. Many jobs do not have a specialist in these digital positions now."

Planners said they use….Scribe (by Scribe)

- Software that enables users to document processes and create step-by-step guides for others to follow.
- Free with limited functionality, subscription-based version available with greater functionality.
- Planners in LPAs are using Scribe to help their colleagues learn how to use specific digital tools and using scribe to develop training videos. They describe it as 'easy to use. You just do [the tasks you want to show a colleague] yourself on the on your computer, and then you just record it and then break it down so everyone else can see exactly how to do it'.

Another major theme is the **lack of standardisation across LPAs and other**

organisations. Respondents noted that inconsistent use of databases, formats, and platforms makes collaboration and data sharing difficult. This fragmentation not only reduces efficiency but also undermines efforts to create a cohesive digital planning system across Wales.

Looking ahead, **respondents see a critical role for both Welsh Government and the Royal Town Planning Institute (RTPI) in managing digital change**. Respondents expect Welsh Government to lead on standardisation, funding, and system integration, while the RTPI is seen as a key player in promoting best practices, offering training, and advocating for digital innovation within the profession as argued by several survey respondents:

> "[Welsh Government] need to step out of the 1950s and set standards for a cross Wales information system covering all geospatial data - designations, planning applications (live and determined), appeal decisions, etc. Also, if they insist on maintaining pre-application consultation requirements for major applications, they need to assist in making available the information that is required for that exercise, i.e. geocoding of addresses etc."

> "The RTPI must continue to actively and regularly engage with stakeholders within LPAs to keep abreast of matters and progress in adopting digital change."

Despite the challenges, the outlook is cautiously optimistic amongst respondents. Most believe that digital planning will have a moderate to significant impact on their work in the next five years. **There is strong support for investment in tools that improve efficiency, public engagement, collaboration, and transparency**. However, realising these benefits will require coordinated action, sustained investment, and a commitment to building digital capacity at all levels.

The planners' perspective on digital planning

Two focus groups were held online via Microsoft Teams in June 2025 to explore the themes and issues raised by participants of the online survey and identified as part of the desktop review. The focus groups were particularly concentrated on exploring the diverse experiences and uses of digital planning in the context of Welsh LPAs. Participants were asked to reflect on their aspirations for digital planning, their observations of how digital planning tools are currently being used by planning departments in LPAs, and factors that they have observed to inhibit or enhance uptake of digital planning practices and tools. Each focus group ran for approximately 45 minutes and included four to five planners from the public, private and third sectors. This section of the report provides a summary of the key themes and issues that emerged from the two focus groups.

Aspirations for digital planning

Focus group participants were asked to consider their aspirations for digital planning and what opportunities digital planning offered not just LPAs, but the wider Welsh planning system. Overwhelming, participants from the public and private sectors described their greatest aspiration for digital planning was that it would **make planning processes easier for planners and communities**. The Welsh planning system has changed substantially in recent years, with increasing demands on applicants to provide greater amounts of information and navigate complex sets of forms to submit planning applications. Participants suggested that this had impacted community perceptions of planning in Wales, making planning appear to be 'mysterious', 'expensive' and generally difficult for lay people to engage with. Focus group participants spoke about **digital planning as a means of modernising planning and improving its reputation** by making the planning process easier to understand, and offering a more streamlined approach to submitting, appraising, and deciding planning applications. Reflecting on positive experiences with different types of technology in their personal and professional lives, participants argued that **planning could be made more intuitive and straightforward** with the use of **user-**

friendly digital interfaces and **standardised approaches** across Wales.

Planners said they use….Opus (by JDi Solutions)

- Software that enables LPAs to run digital planning consultations, including LDPs, Supplementary Planning Documents, and other policy documents.
- Cloud-based platform with council-branded interfaces; requires no local installation and includes regular updates
- Used by planning teams to publish consultation materials, collect structured public feedback, and manage representations efficiently through built-in workflows and mapping tools.

The increased expectations on applicants in recent years was also recognised as having put greater pressure on planners to consider and assess significantly more information as part of every application. Consequently, there was consensus among participants that digital planning could **improve the efficiency of the planning process** by automating or reducing the time needed for certain basic tasks and enabling planners to 'get on' with planning specific tasks. Planners spend significant amounts of time 'working around' existing systems, such as the need to find physical documents or maps in archives to answer basic public inquiries, rather than being able to search for that information digitally. Digital planning tools were seen as particularly exciting because of their growing functionality, and their capacity **to reduce the amount of time planners spend undertaking basic administrative or other non-planning specific tasks**.

There are 25 Local Planning Authorities in Wales, and in recent years there has been an increasing emphasis on regional policies and strategic level decisions in Wales. Focus group participants highlighted digital planning as a means of facilitating greater

collaboration of planners and other stakeholder disciplines across LPAs. The structure of many LPAs means that planning functions are often separated into different teams (such as development management, policy planning, regeneration, etc.). This separation can mean that there is limited discussion or collaboration between such teams in some LPAs. One LPA participant argued that digital planning would '**break down barriers of collaboration**…within local authorities…and outwards to the public'. Participants working in policy planning also emphasised the potential of **greater data sharing and analysis between organisations as enabling better planning outcomes across Wales**.

Experiences of digital planning practice in Wales

Digital planning adoption in Wales is uneven and there exist significant discrepancies between local authorities in their use of different digital tools and systems. The focus groups explored the experiences of digital planning by planners in different local authorities across Wales. Despite planners' aspirations and understanding of what digital planning could offer (see earlier section), the reality of digital planning in practice, in Wales, is that **for most planners the technology is not meeting basic expectations**, let alone enhancing planning processes and outcomes.

LPAs create their own data management systems, and ways of managing workflows in planning processes. Some LPAs are **still reliant on paper documents and physical media** for certain planning records such as tree preservation orders, which can make it very difficult to answer public enquiries quickly. One participant argued that 'the really basic stuff is what takes up the crazy amount of time, but it has a massive knock-on effect…You know it's completely demoralising just to answer a basic query'. They argued that not only is it difficult for planners, but **this inefficiency also has a negative impact on the reputation of the planning system, because applicant experiences of the planning system are of a slow, and ineffective process.**

A lack of digitised historic data was also explained to be a common experience for

LPAs, where in many instances planners are still required to access such data via microfiche, making it difficult to access, search for the relevant information, and then use in decisions. Participants identified the move towards flexible working because of the Covid-19 pandemic as accelerating the need for digitisation of such records. They argue that as more local authorities continue to downsize their physical footprint in favour of a dispersed, hybrid-working workforce, there is 'no space to hold onto these paper records anymore'. Comparatively, other LPAs have much of their historic and planning-relevant data already digitised and accessible via geographic information systems (GIS), meaning they can answer public enquiries very quickly and easily, without needing to access physical copies of data.

Some LPA planners described very different experiences of digital planning. They reported being paperless and cited numerous examples of digital planning innovation and experimentation occurring in their workplace. For example, using a single software system to manage workflow and document management around each planning application, and experimenting with artificial intelligence, 3D models, and chatbots to answer basic planning enquiries. LPA planners working in this context were **already observing digital planning improving the planning system's consistency, and the technology's capacity to reduce administrative time burdens on planners**. Observations of the progress other UK nations were making on digital planning were also noted by the focus groups. Participants felt that **progress on digital planning in Wales was lagging behind the other devolved nations** but could learn from best practice and issues raised through the experiences of digital planning reform in England and Scotland particularly.

Barriers/challenges of digital planning

Uneven capacity to engage in digital planning

Despite the unevenness of digital planning applications in practice, the focus groups revealed that the use and interest in using digital planning tools is increasing across Wales. All focus group participants expressed interest in digital planning tools and

argued that digital planning reform is needed in Wales, with a focus on LPAs. **The current unevenness of digital planning was emphasised to be a barrier to further digital planning reform, and a need to bridge the growing gap between those LPAs with digital planning capacity, and those with limited digital planning capacity**. Based on this, a need to develop a more standard base level of digitalisation across Wales was identified to enable greater consistency across LPAs and improve the overall efficiency of planning processes in Wales.

Lack of standardisation

A variety of factors influence the extent to which digital planning is being embraced and implemented by different LPAs in Wales. The primary barrier to achieving the aspirations of planners for digital planning in Wales is the **lack of a centralised or standardised approach to software, data, and leadership around digital planning**. LPAs are currently using different software packages, data management systems, and data capture procedures to support planning activities. The lack of homogeneity of digital approaches across LPAs is limiting planners' ability to collaborate and coordinate action across LPA borders, share data between organisations (e.g. PEDW, Welsh Government), and avoid duplication of efforts across different organisations entering the same information into multiple systems. The development of Strategic Development Plans in Wales further reiterates the importance of having effective and consistent mechanisms for sharing data and coordinating action across the spatial boundaries of individual LPAs. The 2012 introduction of the standard planning application form (1App) was cited as a positive example of where standardisation had previously improved planning services in Wales. Building on the success of 1App, participants argued that standardisation of many aspects of planning processes through digital planning would be overwhelmingly positive. They suggested that it would help address existing resourcing issues, improve planner's capacity to plan effectively, and simplify planning processes for communities.

The mindset, knowledge, and capacity of planners

The sentiment of the focus group discussions was that digital planning is a positive thing for planners to embrace, and LPAs are largely promoting its benefits to staff. Despite the push from employers towards greater integration of digital planning tools, the mindset, skills, and knowledge of planners remains a barrier to further adoption in many LPAs. Participants observed the attitudes and mindset of their colleagues (rather than their age) played a significant role in how readily they accepted and used digital tools. One LPA planner explained that in his planning team he found that some colleagues 'might want to learn how to do it, but they are just scared of it', while another LPA planner added that while they were a little nervous about such tools, **seeing others using digital tools like AI increased their interest and openness to the use of different software in their work**. This highlights the importance of social learning and exposure to digital tools in enhancing interest in and confidence using digital tools.

Planners said they use….Notebook LM (by Google)

- AI-based notetaking and research software that uses AI to summarise and synthesise information based on uploaded documents.
- Free with limited functionality, subscription-based version available with greater functionality.
- One LPA planner described their experience using Notebook - 'I like to use Notebook LM by Google a lot. It summarises PDF and documents more than anything, but it doesn't go to the Internet to sort of pull things out. So what you get from the summaries and mind maps and even a podcast is just from that document. I found that really useful for creating summaries of large documents.'

Several participants felt that their team's positive mindset towards digital planning was the result of having 'time to get to know new digital systems and… get a sense of it', and 'having that targeted training specifically given to them to help'. Despite this, participants emphasised that many LPAs are under significant workload pressures, which in turn limits the time available for planners to engage with digital planning broadly, or additional digital planning training sessions, while still meeting required deadlines in their daily jobs. The discussion revealed a sense that some planners in leadership positions felt that despite their interest in digital planning, they felt they **did not have sufficient knowledge around which digital tools would be most useful to progress digital planning in their organisation**. One participant expressed a sense of feeling overwhelmed by the number and variety of different digital tools available and not knowing how to weigh up the strengths and weaknesses of them to decide which would work best for their planning team. This suggests **a need for greater guidance, training and leadership around digital planning for LPAs in Wales.**

Technological limitations

There was consensus among participants that existing digital tools were also not always fit for purpose and although they were procured by LPAs for the specific purpose of supporting planning activities, they often lack key functionalities or are limited in how they can be used for key tasks. Some participants highlighted previous negative experiences where their employer had introduced new software with the intention of improving planning services, but due to the software not integrating well with other software packages, required planners to work 'around' multiple software package limitations. Planners stressed that software procurement often led to LPAs being 'locked in' to a particular software package for an extended period, with limited capacity to adjust its functionality, which means **planners are limited by what the software will allow, rather than enabled to do the task required by their job**. One LPA planner also explained that when contacting software providers with requests or suggestions, they are often not responsive to changes to the software that 'could make life easier and could save some work further down the line'. It was

argued that software providers often lacked insight into the needs of planners, which in turn limits their overall functionality and usefulness to planners in practice.

One of the focus groups spoke in depth about their experiences of AI tools such as Co-Pilot. Participants were excited by the potential of AI to provide succinct summaries of large documents or a large number of public consultation submissions, however their experiences using it in practice reiterated that such digital tools need training to be useful, require an expensive subscription to work well, and/or fail to complete certain tasks to a desired standard or level of accuracy. Several participants explained that they had spent significant amounts of time training AI software to undertake certain tasks, with some success.

Planners said they use….Co-Pilot (by Microsoft)

- AI Chatbot integrated into Microsoft and Windows software packages, based on generative AI
- Free for Microsoft users with limited functionality, subscription-based version available with greater functionality
- 'I think my expectations are constantly increasing, particularly with Co-pilot and what that's able to do with helping to write up documents and analyse and summarise documents'
- 'I've found with Co-pilot it gets quite addictive and when I'm writing a paragraph now, I've put it into Co-pilot almost to proofread it, sort out the commas and the spelling and stuff and put it back in, just everything gets a lot quicker'

Other participants had largely used free versions of AI software (e.g. ChatGPT), which limit the number of documents able to be uploaded and summarised for the

user, which reduced the usefulness of the software in practice. There was a strong sentiment that **AI could be very useful, but like many other digital tools, was currently not fit for purpose or compatible with many other digital tools within the planning system**. While not raised by focus group participants, it is important for planners to also be aware of the legal and ethical issues of using AI when dealing with potentially sensitive information.

Conclusions

The project began with the following aims:

- To scope the current technical capacity within LPAs in Wales,
- To identify existing LPA policies to guide digital transformation within planning
- To identify examples of good practice within Wales or that could inform the development of digital planning in Wales;
- To identify conditions that could enable the development of digital planning in LPAs in Wales;
- To identify barriers to developing digital planning in LPAs in Wales;
- To identify how digital planning could contribute to positive planning outcomes in Wales.

This section presents the primary conclusions of the project and sets out a series of recommendations for the RTPI and its stakeholders to focus on as they move towards greater use of digital planning tools and frameworks.

Digital planning can improve planning's reputation in Wales

A recurring theme in the research is the perception that the planning system in Wales is slow, inefficient, and lacking in transparency. Participants noted that these inefficiencies, particularly the impact of delays due to a reliance on hybrid/paper-based records and fragmented digital systems, negatively affect public experiences of the planning process. This reputational challenge was seen as a significant concern by some participants. In contrast, digital planning was viewed as a means of improving the public image of planning by streamlining processes, enhancing transparency, and making planning information more accessible and user-friendly. Planners expressed optimism that digital tools could help modernise the system and improve public trust by delivering a more responsive and efficient service that is expected by the public and those in industry that engage with it on a regular basis.

Technical capacity across LPAs in Wales is uneven but improving

The research reveals a mixed picture of digital readiness across LPAs in Wales. While most planners are confident using standard digital tools such as email, word processing, and spreadsheets, the confidence using, and adoption of, more advanced technologies, such as GIS, AI-assisted tools, and digital engagement platforms varies significantly. Planners' use of digital tools also rarely extends to using them to help them make decisions, but rather is more forced on dissemination, data processing, and data collection. Some LPAs are actively experimenting with new technologies and have digitised large portions of their planning records, while others continue to rely on hybrid digital/paper-based archives and legacy systems. This unevenness is not only a technical issue but also reflects broader differences in organisational capacity, funding, and leadership. **The result is a fragmented digital landscape in which some authorities are well-positioned to innovate, while others struggle to balance statutory planning duties with investment in digital planning infrastructure.** Addressing this disparity will be essential to ensuring that all LPAs can benefit from the potential efficiencies and improvements that digital planning might offer, enabling collaboration on Wales-wide planning initiatives such

as the development and implementation of Strategic Development Plans.

Digital planning is not yet guided by a coherent policy framework

Despite growing interest in digital planning, there is currently no dedicated national strategy or policy framework in Wales to guide its development. Wales lacks a formal digital transformation plan specific to planning and instead relies on broader digital transformation strategies or ad hoc initiatives. This absence of strategic direction has led LPAs to adopt individual software, data management, and service design standards. **Without a clear framework, LPAs are left to navigate digital transformation independently, often without the resources or expertise to make informed decisions.** This limits opportunities for collaboration, standardisation, and shared learning across the sector. A coherent policy framework would provide much-needed clarity and coordination, helping to align digital planning efforts with national priorities and ensuring that innovation is both purposeful and scalable.

Good practice exists but is not widely shared

The research identified several examples of innovative digital planning practice across Wales. These include the use of AI to summarise consultation responses, digital platforms for public engagement, and integrated systems that streamline application workflows. However, these examples tend to be isolated and are not consistently shared or adopted across LPAs. **There is currently no formal mechanism for disseminating good practice or facilitating peer learning, which means that valuable insights and lessons are often lost.** Planners expressed a strong interest in learning from one another and in seeing how digital tools are being used in different contexts as well as the potential pitfalls of their use. Establishing a national platform or network for sharing digital planning innovations would help to build collective capacity, reduce duplication of effort, and accelerate the adoption of effective tools and approaches. Organisations such as RTPI Cymru, the Planning Officers Society Wales, and Cardiff University could play a central role in establishing

such a platform or network.

Enabling conditions include standardisation, leadership, and collaboration

A recurring theme throughout the research is the importance of standardisation and coordination in enabling digital planning. **Planners frequently cited the lack of common data formats, software systems, and planning processes as barriers to collaboration and efficiency.** These inconsistencies make it difficult to share data, integrate systems, or work across organisational boundaries. In addition, there is a clear need for stronger leadership, both within LPAs and at the national level, to champion digital transformation and provide strategic direction. Planners also emphasised the value of collaboration, both within and between authorities, as a means of building confidence, sharing knowledge, and developing more consistent practices. Creating the conditions for digital planning to thrive will require a coordinated effort to align systems, build leadership capacity, and foster a culture of collaboration across the planning sector.

Barriers include skills gaps, resource constraints, and organisational culture

While there is strong interest in digital planning, several barriers continue to limit its uptake. **Many planners reported gaps in digital skills, particularly in relation to specialist tools such as public engagement platforms, data visualisation platforms, and AI.** Even where tools are available, time pressures and heavy workloads often prevent staff from engaging with training or experimenting with new technologies. In some cases, organisational culture and attitudes toward change also act as barriers, with some staff hesitant or unsure about adopting unfamiliar tools alongside a lack of centralised IT and procurement support. These challenges are compounded by broader resource constraints, including limited funding for software, training, and dedicated digital roles. Overcoming these barriers will require a sustained commitment to workforce development, organisational support, and the creation of environments in which planners feel empowered to innovate and adapt.

Digital planning must be embedded within a broader strategy for planning reform

A central conclusion of this research is that digital planning must be understood not as a standalone innovation, but as part of a broader strategy to strengthen the planning system in Wales. **While planners are optimistic about the potential of digital tools to improve efficiency, transparency, and public engagement, these benefits will only be realised if digital transformation is supported by adequate resourcing, leadership, and organisational capacity.** This aligns closely with the findings of the 2023 RTPI Cymru report Building Capacity through Collaboration and Change, which highlighted the cumulative impact of underfunding, staffing shortages, and increasing workloads on the ability of LPAs to deliver effective planning services. This points to the need for coordinated national action to address these systemic challenges, through investment in digital infrastructure, standardised systems, and skills development, ensuring that digital planning contributes meaningfully to a more resilient, equitable, and future-ready planning system in Wales.

Recommendations

Based on the above findings, this section provides a series of recommendations for enhancing digital planning capacity in LPAs in Wales.

Recommendation 1: Develop a Digital Planning Governance Framework for Wales

To ensure a coherent and interoperable digital planning system across Wales, it is recommended that Welsh Government establish a Digital Planning Governance Framework. This framework should provide clear national direction and oversight for the digital transformation of planning services, ensuring that all LPAs operate within a shared structure while retaining flexibility for local innovation. This should include a strong emphasis on the standardisation of data formats, file naming conventions, and the adoption of common data structures for planning applications, spatial datasets, and consultation records, as well as the promotion of approved or open-source software solutions that meet national interoperability standards. By embedding these technical standards into the governance framework, LPAs will be better equipped to integrate digital tools into their day-to-day operations, reduce duplication of effort, and deliver more transparent and accessible planning services. Standardisation will also lay the groundwork for future innovations and ensure that all LPAs, regardless of size or resources, can participate fully in a modern, connected planning system.

Recommendation 2: Establish clear leadership for digital planning in Wales

Alongside the Digital Planning Governance Framework, to ensure effective implementation and sustained progress, a governance body should be established to oversee the framework, monitor its rollout, and support collaboration across the sector. This body would play a key role in coordinating efforts, resolving challenges, and ensuring that digital planning in Wales is delivered in a coherent, equitable, and strategically aligned manner. It should be led by Welsh Government but representatives from RTPI Cymru, LPAs, Centre for Digital Public Services, and

relevant digital service partners as advisory board members. The body would define a national baseline of digital capability, setting out the minimum expectations for all LPAs in terms of digitised planning records, access to core GIS layers, and the use of integrated digital systems. Central to this is the commitment to ensure appropriate funding is available to LPAs to meet the defined baselines.

Recommendation 3: Wales-wide spatial data infrastructure

The research highlighted the need for a central repository of planning data to improve coordination and reduce duplication. To support a more integrated, transparent, and data-driven planning system, it is recommended that Welsh Government or a designated national body such as the Centre for Digital Public Services establish a centralised spatial data platform for planning or potentially extend the capabilities and purpose of DataMapWales. The platform should serve as a single, authoritative source for planning-related geospatial data across Wales, incorporating standardised GIS layers such as land use, environmental constraints, and statutory designations, alongside live and historic planning application and appeals data. In addition to data storage, the platform should provide tools for visualisation, spatial analysis, and public access, enabling planners, stakeholders, and communities to engage more effectively with planning information. To ensure the platform's reliability and long-term value, robust data governance protocols must be implemented, covering data accuracy, privacy, interoperability, and ongoing maintenance. Establishing this infrastructure would not only improve consistency and efficiency across LPAs but also lay the foundation for more collaborative and evidence-based planning practices across Wales.

Recommendation 4: Promote collaboration and cooperation between LPAs regarding training and discussion of best practice uses of digital planning tools

Participants in the workshops identified that there is currently a limited amount of collaboration and coordination across LPAs regarding digital tools, despite

acknowledging the importance of learning from others' experiences and increasing awareness through observation. Consequently, there is a need for different levels of training in digital planning. Ongoing training is needed for planners in how they can best use digital tools appropriate to their job tasks. Beyond the practical level of digital skills training, there is also a need for higher level digital literacy training for those in leadership positions to ensure they are informed when procuring digital tools for their teams. Working collaboratively to coordinate training across LPAs and the private and non-profit planning sector will enable digital planning capacity building across Wales in a consistent way, sharing of best practice examples, and use of available resources in an effective and efficient way. This would simultaneously allow for space for innovation and improvement, while also reducing workload and resourcing pressures as identified in the findings of the 2023 Building capacity through collaboration and change RTPI Cymru research paper. The RTPI and CDPS should play a key role in this process through the facilitation of CPD training.

Recommendation 5: Reduce duplication, increase transparency, and streamline application and decision-making processes

A key issue raised by participants in this research is the need to use digital planning to simplify planning processes for communities and planners and to improve the reputation of the planning system in Wales. There is a need to further explore where digital tools could best be used to reduce duplication, increase transparency, and streamline application and decision-making processes. This work should draw on the expertise of planning practitioners who have a strong sense of the needs and regulatory requirements and can ensure that digital planning reforms respond directly to the needs of planners. This work should feed into the approved or open-source software solutions that meet national interoperability standards as identified within the Digital Planning Governance Framework and facilitated by the proposed associated governance body. A national platform or network for sharing digital planning innovations would help to build collective capacity, reduce duplication of effort, and accelerate the adoption of effective tools and approaches.

Recommendation 6: Modernising planning legislation to enable digital transformation

Participants in this research identified multiple instances where the lack of digital standards and statutory requirements limited the use of digital planning tools or led to barriers to achieving good planning outcomes in an efficient manner. To ensure planning legislation in Wales works to enable digital planning, it should be reviewed and updated where necessary, with particular attention paid to mandating the standards set out in the Digital Planning Governance Framework. Drawing on the desktop analysis and participant feedback several key areas have been identified for review. First, the potential impact of introducing statutory requirements for the use of standardised digital systems and data formats across all LPAs, ensuring interoperability and consistency in how planning information is created, stored, and shared. Second, the potential to mandate the publication of planning data, such as development plans, applications, and decisions, in open, machine-readable formats, enabling integration with a national spatial data platform to improve transparency and accessibility. Finally, digital requirements to be embedded directly into plan-making and development management processes, requiring that LDPs and associated evidence bases be prepared and published in digital formats that support analysis, visualisation, and integration with other datasets, while ensuring that planning applications are submitted, processed, and monitored through end-to-end digital systems. This recommendation aligns closely with the 2023 Building Capacity through Collaboration and Change RTPI Cymru report, which emphasised the need for systemic reform, improved digital infrastructure, and better information systems. Embedding digital standards and requirements into planning legislation directly supports the report's call for a more resilient, efficient, and future-ready planning system in Wales.