

# Getting to grips with digital planning

**We should see data-sharing as a planning benefit and build digital ethics into consent regimes, says Sue Chadwick**

1947 was relevant to planning in two ways. Obviously, the 1947 Planning Act - but also for a lecture by Alan Turing to the Mathematical Society introducing something he called the 'automatic computing engine' and its endless possibilities. Fast forward to 2021 and computers are everywhere but we are still defining land as a "corporeal hereditament". This means that we still have no real notion of what digital planning might mean, in terms either of impacts or benefits.

In its response to the Building Better Building Beautiful report the Government agreed that digital technology can and should transform the way in which the planning system operates, including through digitisation of processes including automation - the use of Artificial Intelligence or AI - but the planning system has to jump from 1947 to 2021 - and the Government has to jump with it.

## Defining digital planning

The shift must start with an understanding of what digital planning means.

At a basic level it simply means an electronic version of something that was previously on paper. Thanks to Covid there have already been developments in this area such as electronic site notices. So we're replacing paper documents with machine readable versions; we're replacing paper notices with electronic ones; physical with digital service; physical with digital deposit. This is an extraordinary leap forward in a short time and something to be proud of as a profession, especially the local authorities who did so much in such a short time.

Digital engagement is another developing area. Drone footage is enormously helpful in creating an enriched version of a site and the creation of collaborative consultation platforms brings a much wider range of people into the process, engaging future as well as existing populations.

Then there's the notion of the digital twin - an electronic model that is a sort of digital shadow of the original and this is already something that is familiar to construction professionals. In planning, there is an emerging concept of the smart city -

where digital information about buildings merges with data about environment, the infrastructure and even the humans who inhabit it. The richer these models are in terms of data the more capacity they have to be used for modelling various scenarios, something that will be particularly useful as we recover from the shock of the pandemic and start to think of ways that buildings can be repurposed.

The development of sensory technology means that existing data can be considered in parallel with new real time information on things like air quality and possibly even biometrics. The Centre for Digital Built Britain has a research paper on the use of drone swarms for inspecting historic bridges and in the future this sort of technology will also monitor environmental impacts using edge technology.

Then there is automation. Predictive modelling is one of the things that AI does really well and we can expect this to be one of the growth areas. Another is processing of applications where documents can be filled in on-line as part of an automated process. We're also going to see much more automation of processes such as like calls for sites on local plans and digital EIAs

## Issues

We already have some regulation of data and information in planning, held in lots of different pieces of legislation. The Development Management Order Procedure regulates the management of information in the planning application process from pre-application consultations through to registration of permissions after they are granted. The Environmental Information Regulations give the public rights of access to environmental information - a term which is very widely defined. The Local Government Act has its own requirements about access to information, including the requirement to disclose all background papers in committee reports.

And there is the General Data Protection Regulation or GDPR that defines and protects personal data but also has regulation 22 that applies to decisions made through automated processes. In terms of digital data, the Building Safety Bill will

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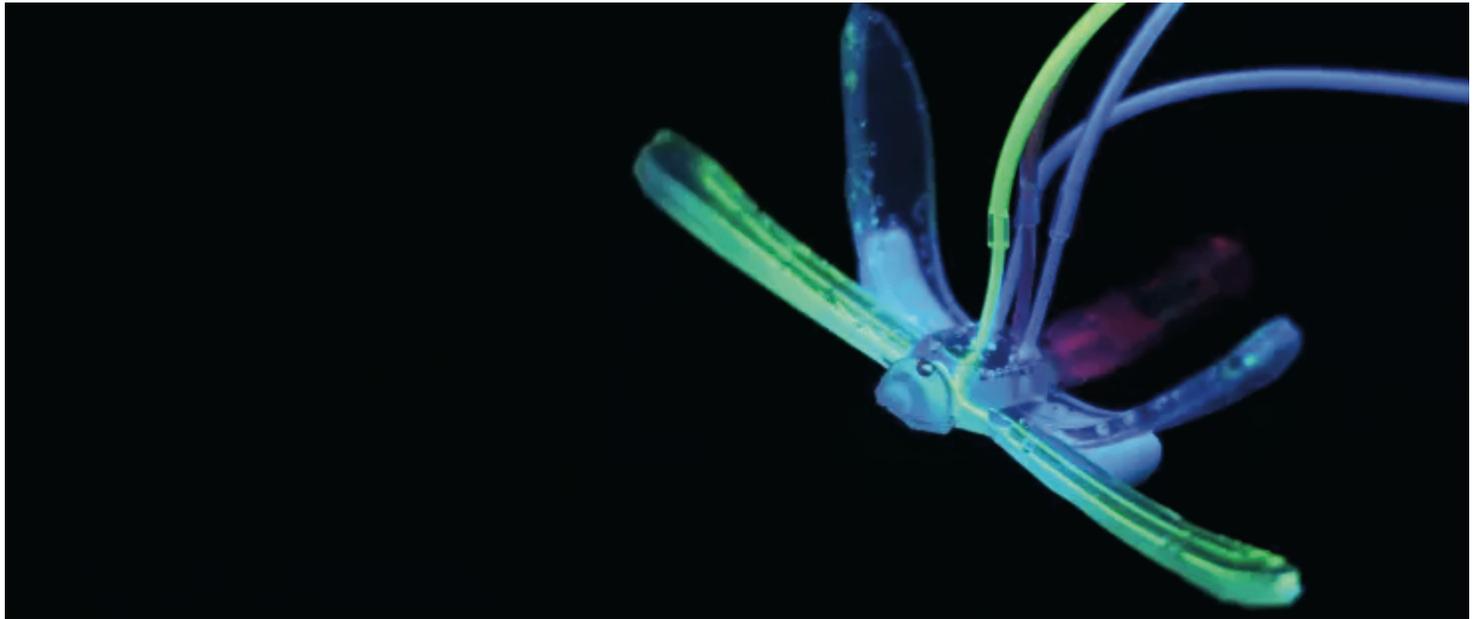
Dr Sue Chadwick is Strategic Planning Advisor for Pinsent Masons LLP

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be the first legislation that says some developments will have to create and maintain a secure data cache through the life of the building.

One of the things that has been improved over the last year is e-consultation and the ability to reach so many more people so much more easily. It has dramatically improved the scope of engagement, but it has also highlighted the issue of digital exclusion and discrimination – not just the older generation but anyone without digital skills, functioning devices or poor connectivity. The existing legal framework for consultation is based on paper methods and underpinned by rigorous principles that say you must consult at a formative stage; you must have reasons; you must have adequate time and you must take the product into account. I'm not convinced that all of the "smart engagement" tools build these issues into their functions.

Then there is the issue of data management. I think most local authorities now are feeling the pressure to digitize and I also think there's a lot of willingness to change but it's difficult to know where to start, especially for the local authorities sitting on enormous numbers of non-machine readable pdfs.

AI has the potential to be a really useful function in planning – it can do a lot of the administrative "heavy lifting" and could improve the evidence base for complex decisions that rely on environmental data. But, of course, it has its own issues. Apart from compliance with Article 22 of the GDPR, as the technology becomes more sophisticated it will raise questions such as "did a human or a machine make this decision?", "can an automated decision be a reasoned decision", and "if we don't know how the algorithm works, is the decision transparent enough?"

Finally, there is the issue of public trust, particularly after the exam marking fiasco last summer. Biometric sensing technolo-

gies are likely to be a major concern in this area, especially as this technology is becoming embedded in buildings and public environments. This technology can acquire, and process data from our faces, our fingerprints, even from the way we walk. There is already one case where the Court of Appeal ruled that the use of automated facial recognition or AFR engaged and infringed Article 8 of the Human Rights Act and that the police should have had more regard to the potential for algorithmic bias and this is likely to be just the start.

#### Responses

It's no secret that there is a resource issue in local government planning at the moment and it's understandable that the lack of resource and skills are one of the reasons that digital planning is not being adopted as quickly as it should be. The Government has promoted the "proptech" industry as the solution and it certainly could be, but it is counterproductive for a local authority to purchase a piece of software unless they build in safeguards on issues like compliance with GDPR, cyber security, interoperability and ethical concerns including human rights and equalities.

A recent report by the Centre for Data Ethics and innovation looked at the use of data by local authorities during Covid and noted that

"Everybody was concerned about data governance but also found it difficult to translate theoretical frameworks into practical steps". This is, I think, the primary barrier to the general adoption of digital planning. The good news is that there are a lot of changes that we could make immediately that would make a big difference.

First, procurement. I think it is crucial that whether you are a >>>

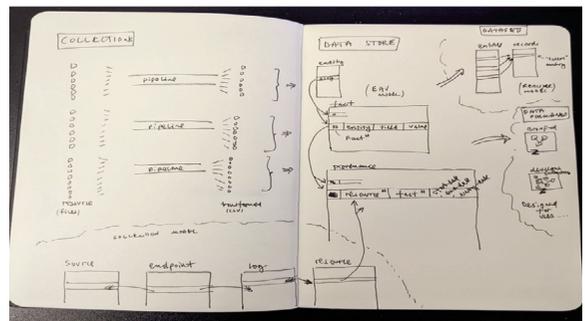
ABOVE:  
This dragonfly-shaped robot could spot environmental issues  
Source: World Economic Forum



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>>> council thinking of using new software to help with a development planning function, or a developer using it to plan, construct or manage buildings or land, that you consider things like algorithmic bias, explainability and interoperability right from the start. If issues such as poorly trained data and lack of expertise are eliminated at this stage it significantly reduces the chances of creating a “mutant algorithm” further down the road.

Next, transparency. Sometimes it seems as though there is a new “proptech” solution to every problem, but what I have not seen yet is a policy document that sets out a corporate approach to use of new technologies, or a consultation on whether a particular piece of software should be used or a decision formally adopting its use. It may be too early for these governance safeguards to be mandated but as new technologies become embedded in the planning function it will become increasingly important to ensure that the shift is made in consensus with members of the local authority and the public.

Then there is data management. We are stuck, for now, with a definition of land as a “corporeal hereditament” but we need to start thinking of land as a digital, as well as a physical entity, with its own benefits and risks. We could screen for digi-

tal impacts along with the environmental ones, we could have a digital access and design statement along with other application documents, we could consider digital discrimination and algorithmic bias along with the other equalities considerations and we could take shared data into account as a planning benefit

Finally, I think the Government has to go beyond grand statements supporting digital planning and start to bring in some specific guidance. We need a specific section in the NPPG on digital planning that includes a set of approved data standards, a robust definition of digital consultation, and changes to the Development Management Procedure Order that makes submission of applications digital by default.

The Planning White Paper promised “Radical reform unlike anything we have seen since the Second World War”. The current planning system was created just after that war ended but it is the Government that seems intent on turning the clock back by requiring a return to physical meetings.

I am incredibly positive about the possibilities of digital planning but if the Government wants to see real change, making the necessary legislative changes to facilitate virtual meetings would be an excellent start that we would all welcome. ■

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(Hopefully not) to this.

