

The Future of Practice

Good afternoon, everyone. Thank you Hilary/Jo

We have heard about the importance of understanding the values, narratives and reasoning that sit behind planning decisions. I'd like to build on that by exploring the role of digital in planning practice.

Today I'd like to talk about something that sits at the intersection of urban planning, spatial intelligence and digital innovation.

This is an area that has increasingly become the focus of my work.

The image on the opening slide is deliberate. It illustrates, in a fairly simple way, the evolution of planning – from traditional maps and documents towards a much more connected, information-rich representation of our cities.

There is an old saying that a picture paints a thousand words. I think this image does exactly that.

Despite a background in spatial digital information technology.

This isn't really a presentation about GIS, computers or technology. It's about what modern planning practice needs to become, and how data, digital systems and increasingly artificial intelligence can help us get there.

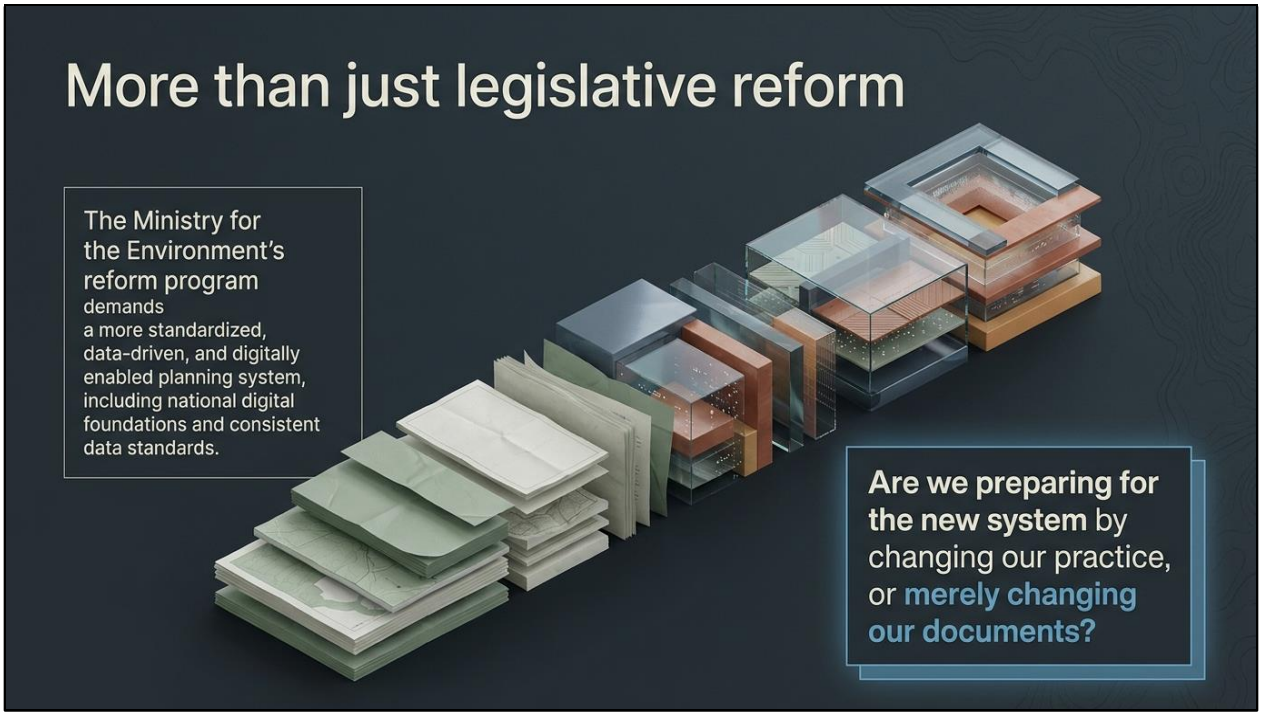
Historically, planning has relied heavily on documents, maps, reports and professional interpretation.

Those things aren't disappearing. But the way we use information is changing.

So the question I'd like us to consider today isn't simply:
How do we digitise what we currently do?

It's a much bigger question:
What does planning look like when information is structured, spatial, connected, machine-readable and increasingly automated?

That's where I'd like to take the discussion.



More than just legislative reform

When we talk about planning reform in New Zealand, much of the public discussion tends to concentrate on legislation.

What are the new rules? What happens to the resource consent process? What changes for property owners and developers? How will councils operate?

These are all important questions.

But I think there's another dimension that deserves just as much attention.

The Government's reform programme is also pointing towards a more standardised, data-driven and digitally enabled planning system.

That includes common data standards, national digital foundations, consistent plan structures, core datasets and the electronic accessibility of planning information.

Ultimately, the ambition is for planning information and processes to become much more consistent and accessible, including through a national e-planning portal.

Now, why is that significant?

Because standardising the rules is only part of the challenge.

We also need to standardise how information is organised, how it is described, where it comes from and how different systems can use it.

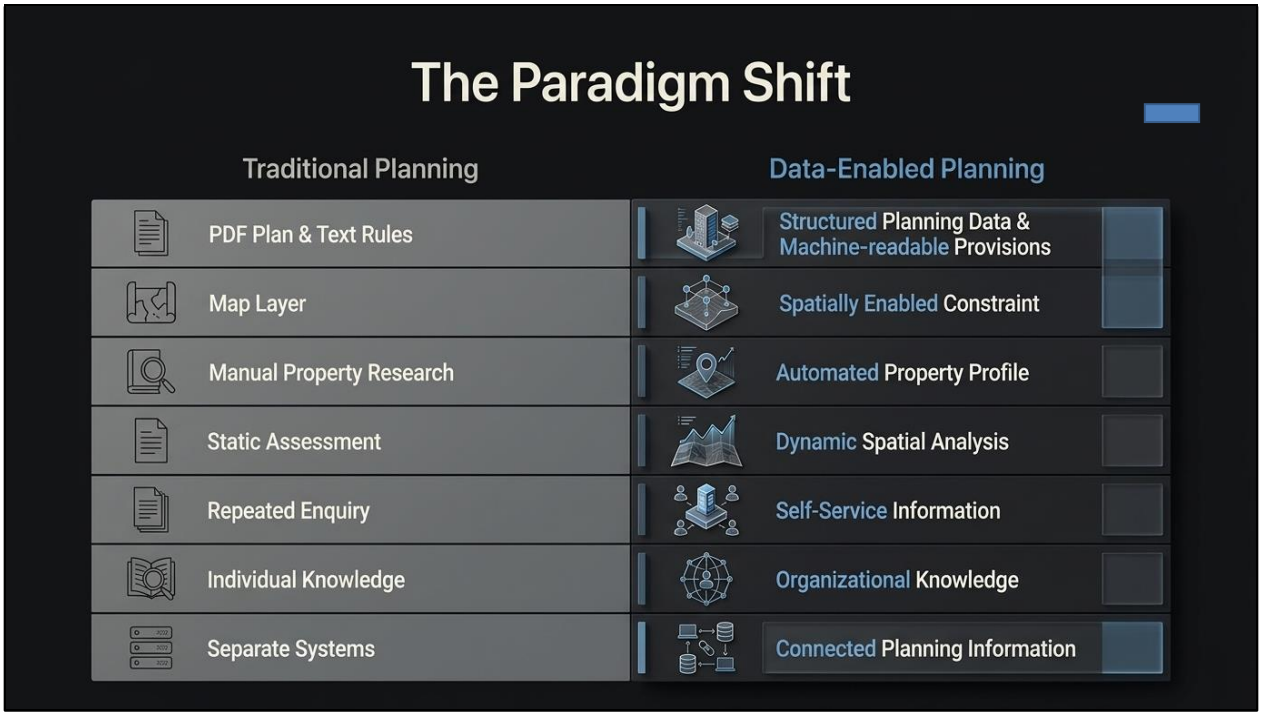
Think about it this way.

We could change the legislation, introduce new planning rules and put all our plans online, but still leave planners working with disconnected systems, spreadsheets, PDFs and manually assembled information.

That wouldn't necessarily transform the way planning is practised.

The bigger opportunity is to change the underlying way information is managed and used.

And that leads into the next slide.



The Paradigm Shift

This slide illustrates what I see as the emerging paradigm shift.

On the left is a more traditional approach to planning.

Information is held in PDF plans and text rules. We have separate map layers, manual property research, static assessments and repeated enquiries.

Knowledge often sits with individuals or within separate organisational systems.

On the right is a different way of working.

Planning information becomes structured. Rules and constraints become spatially enabled. Property information can potentially be assembled automatically. Assessments become more dynamic, and information becomes more connected.

Importantly, knowledge becomes something the organisation can access and share, rather than something that depends on knowing the right person to ask.

I don't want to suggest that the traditional approach has no value. It has served planning for a long time.

But the opportunity is to move from a system where people have to find, assemble and interpret information manually, towards one where much of that information is already connected and available.

There are three important ingredients in making that happen.

People, process and platform >

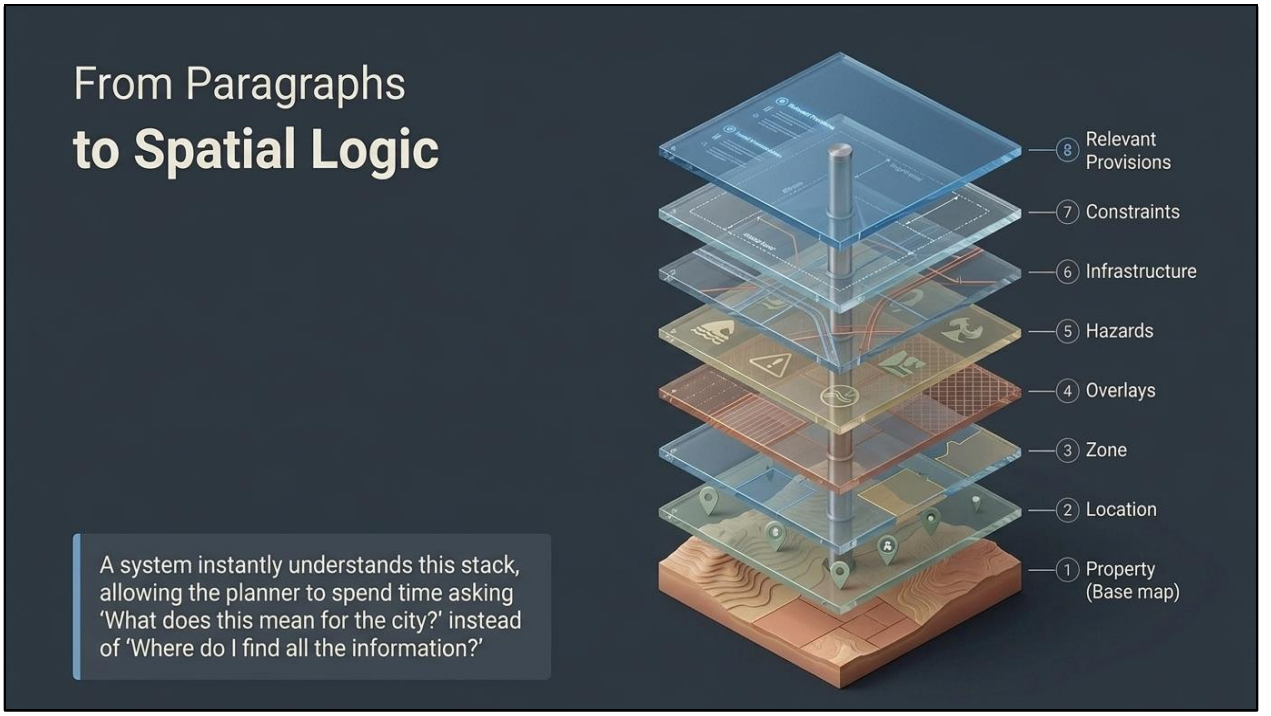
We need people with the right skills and understanding.

We need processes that support consistent ways of working.

And we need digital platforms that allow information to be connected and used.

You cannot simply buy a new software platform and expect modern planning practice to emerge.

All three elements need to develop together.



From paragraphs to spatial logic

This is probably one of the more important slides in the presentation.

Traditional planning is often expressed through written descriptions.

For example, we might say:
"The site is within the Aokautere Development Area and is subject to a range of relevant planning provisions."

That's a perfectly reasonable planning statement.

But think about what a planner actually has to do to arrive at that conclusion.

They need to identify the property, establish where it is, identify the zoning, check relevant overlays, consider hazards and infrastructure, understand constraints and then work through the applicable planning provisions.

That's quite a lot of information to assemble.

Now imagine a system where much of that relationship already exists.

The property is linked to its location. Its location is linked to the zone, overlays, hazards, infrastructure and constraints. Those are then connected to the relevant provisions and applicable development standards.

The system can potentially assemble that information automatically.

But I'd add another important dimension here: **people**.

Planning isn't just about land, buildings, roads and infrastructure.

It's about the people who live in our cities and communities.

We should increasingly be able to bring demographic information into that spatial picture – population growth, household size, age profiles, changing communities and the demand for services.

For example, when considering an area for future development, we shouldn't only ask how many houses might fit there.

We should also be asking who might live there, what their needs might be, what services they will require and how the development contributes to the wider community.

That is where spatial information becomes particularly valuable.

The planner's role starts to shift.

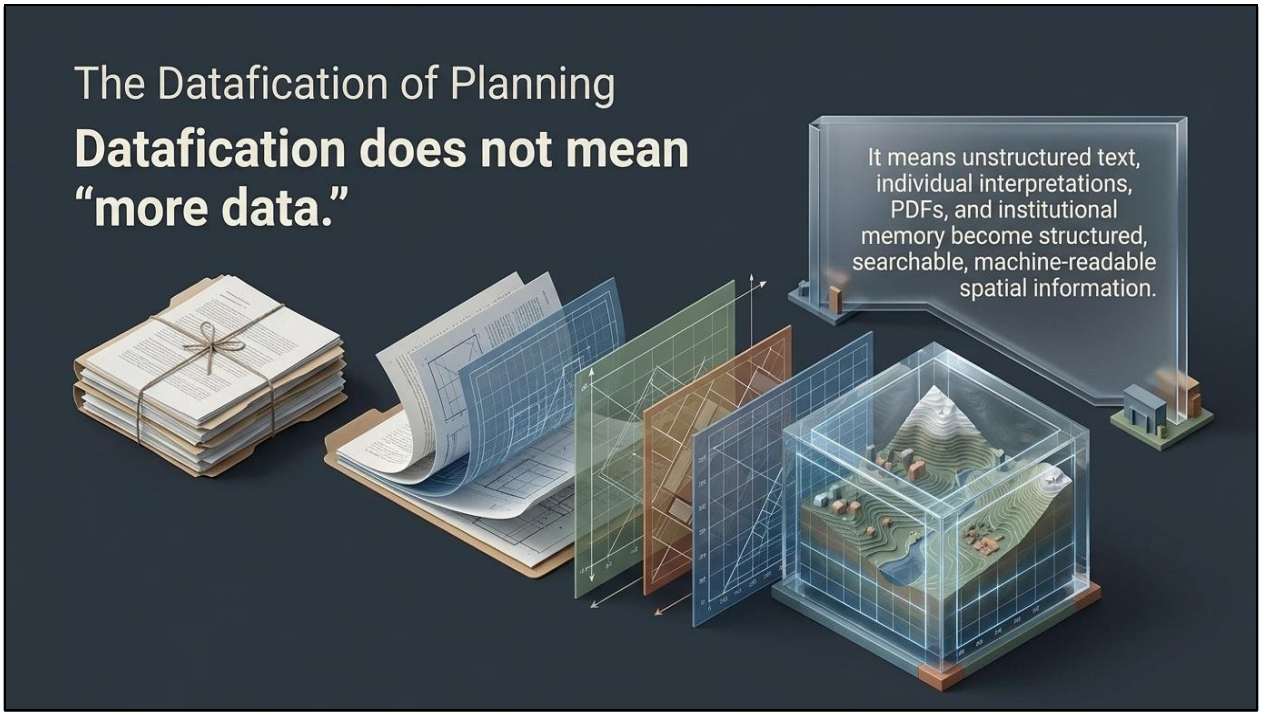
Instead of spending a considerable amount of time asking:

"Where do I find all the information I need?“

We can spend more time asking:

"What does all this information mean for the city, its people and the decisions we need to make?“

That's a significant change in professional practice.



Datafication of planning

This brings me to an idea that is sometimes referred to as the datafication of planning.

It sounds quite technical, but the principle is relatively straightforward.

Datafication doesn't simply mean collecting more data.

It means taking information that has traditionally existed in different forms and making it structured, searchable, connected and usable.

Think about the information we currently rely on.

Professional knowledge, paper plans, PDFs, maps, spreadsheets, individual interpretations and institutional memory.

A considerable amount of our planning knowledge is locked up in those different formats.

Some of it is documented. Some of it is held in people's heads. Some of it exists in systems that don't communicate with each other.

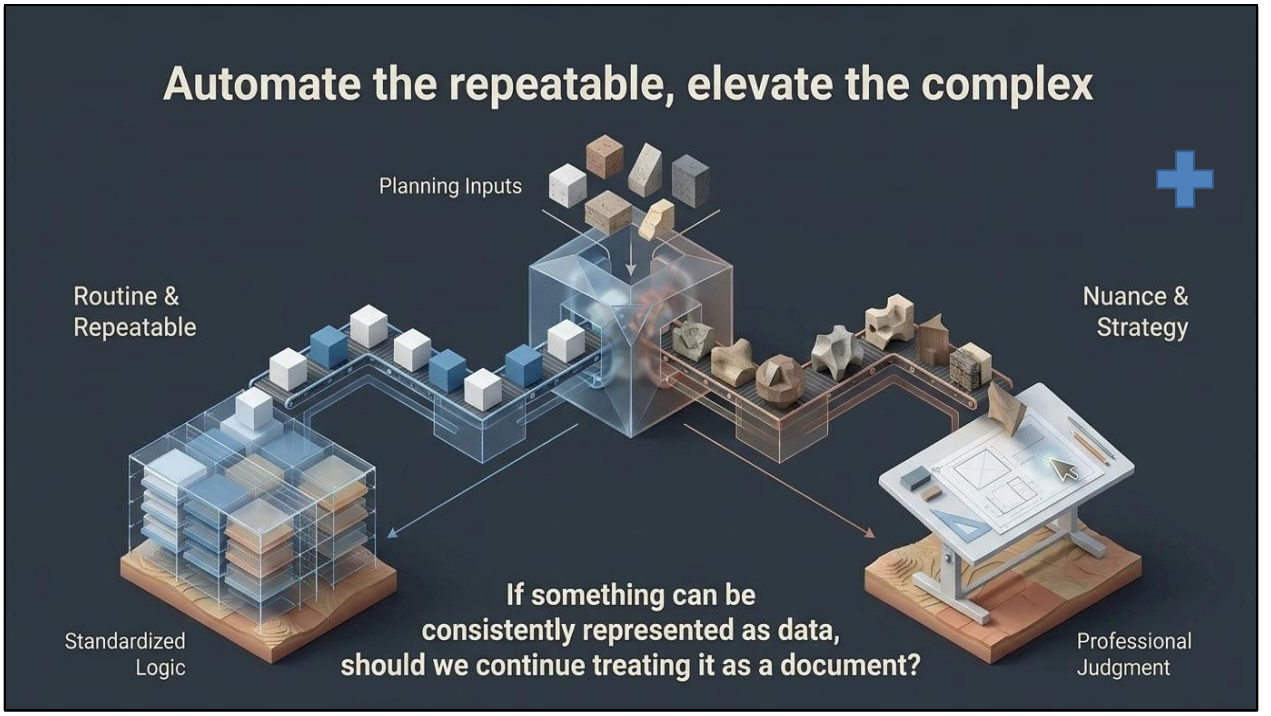
The opportunity is to progressively turn that information into structured information that can be searched, analysed, linked, visualised and potentially processed by computers.

Now, that doesn't mean that we can or should turn every planning decision into a dataset.

Professional experience and contextual understanding remain important.

But where information can be consistently represented as data, we should consider whether it needs to remain locked inside a document.

And that takes us to the next slide.



Automate the repeatable, elevate the complex

This slide poses an interesting question:

What planning information should a computer actually be able to understand?

Let's take a few examples.

Today, we might have a district plan in PDF format. In the future, we could have structured planning data where the relevant provisions are clearly identified and linked to the spatial information they apply to.

Today, a planner might manually research a property to establish its planning constraints. In the future, an automated property profile could bring much of that information together.

Today, we might undertake a static assessment using several separate spreadsheets and datasets. In the future, we could have connected information that supports more dynamic spatial analysis.

And instead of repeatedly responding to the same basic enquiries, some information

could become available through self-service systems.

The idea is to make information more accessible, consistent and reusable.

But there's an important distinction here.

I'm not suggesting that everything should be automated.

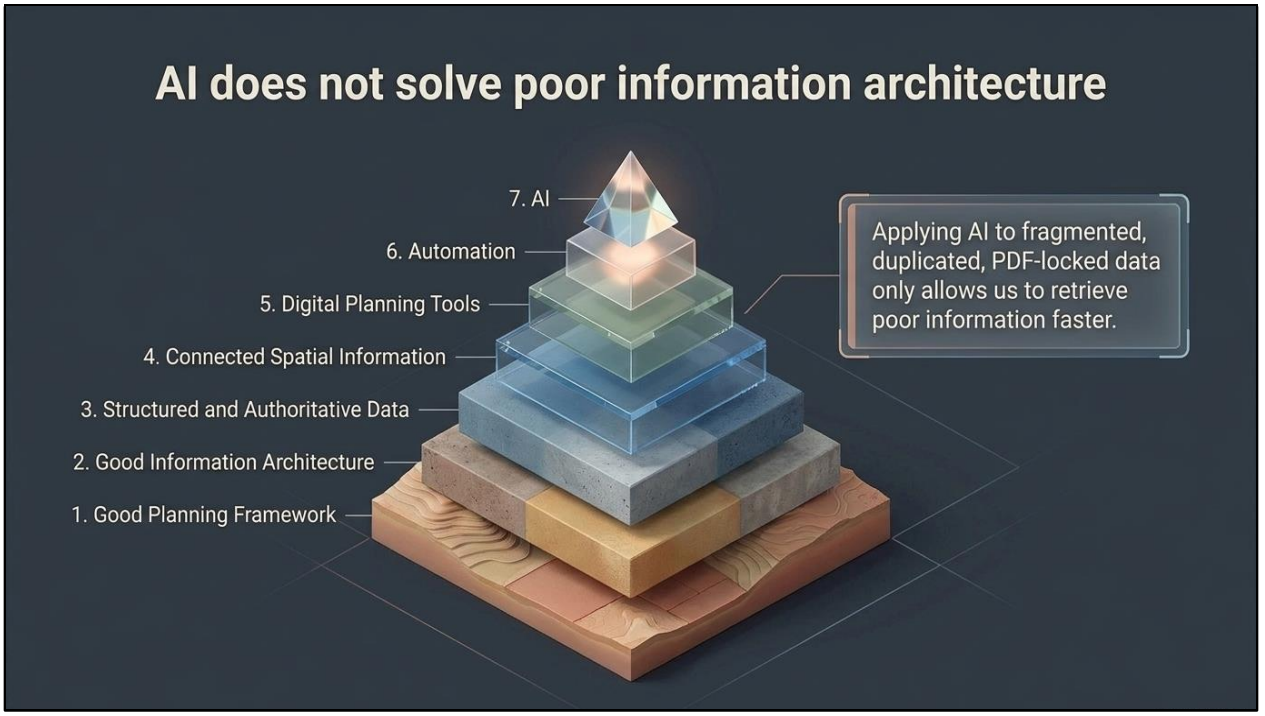
There will always be planning questions involving competing interests, ambiguity, values and judgement.
Those are precisely the areas where human expertise is most important.

The principle is: **Automate the repeatable and elevate the complex.**

If something can be consistently represented as data and processed reliably, why should we continue treating it as a document or manually repeating the same task?

But where there is nuance, complexity and professional judgement, we should preserve the human role.

That is the balance we're trying to achieve.



AI does not solve poor information architecture

Now let's bring artificial intelligence into the discussion.

I have deliberately placed AI towards the end of the presentation rather than at the beginning.

And there's a reason for that.

AI doesn't solve poor information architecture.

There's currently enormous interest in AI and its potential to transform professional work.

We can imagine systems that read planning documents, interpret provisions, answer questions, summarise reports and help people navigate complex planning information.

Some of those capabilities are already emerging.

But there's a fundamental problem.

If the information underneath those systems is fragmented, inconsistent, duplicated, poorly structured or inaccessible, AI doesn't magically fix that.

It may simply allow us to retrieve or manipulate poor-quality information more quickly.

Think about trying to get an answer from a collection of documents that contain conflicting

definitions, outdated information or unclear rules.

The technology might produce an answer, but that doesn't necessarily make the answer reliable.

So I think we need to get the sequence right.

First, we need a good planning framework.

Then good information architecture – knowing how information is structured, organised and managed.

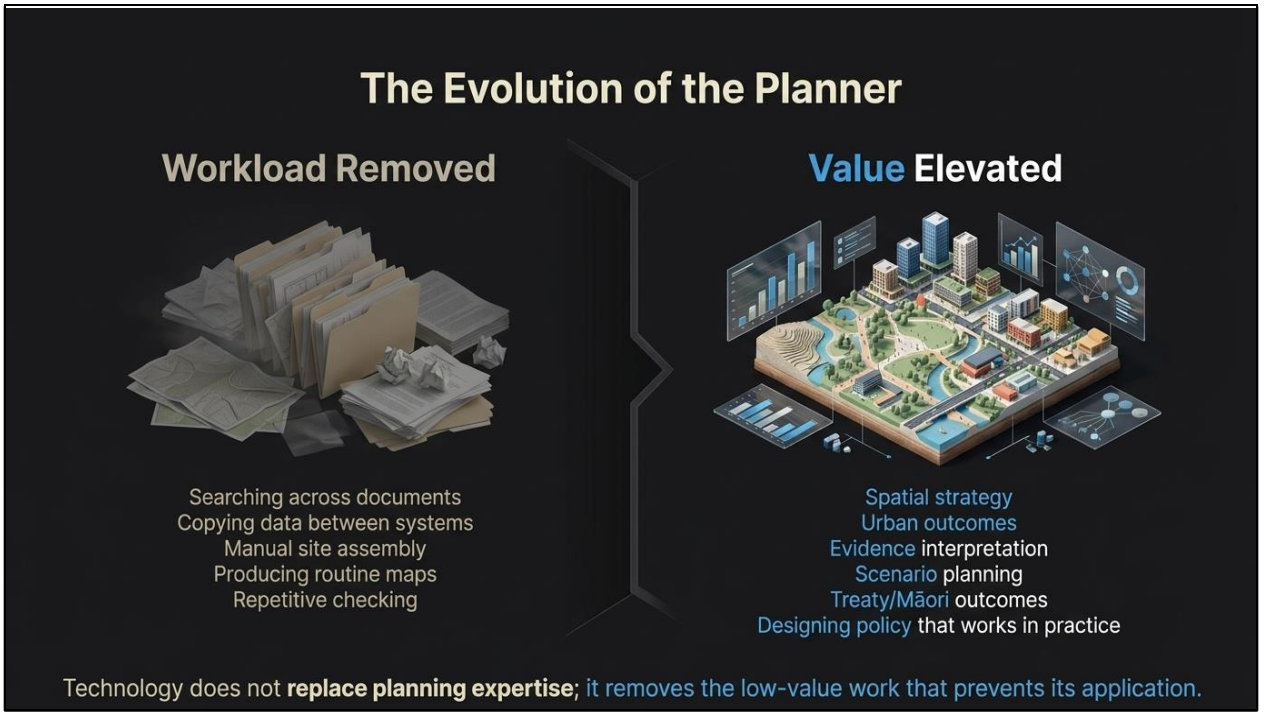
We need authoritative and structured data, connected spatial information, digital planning tools and opportunities for automation.

And then AI can become much more powerful.

The important point is that AI should be part of a broader transformation, not the starting point.

The more strategic question isn't simply: "Should we be using AI?"

It’s: "Are we building the information foundations that will allow us to use AI effectively and responsibly?"



The Evolution of the Planner

This is probably the most important slide in the presentation because it brings the discussion back to people and professional practice.

So, what happens to the planner?

There's often a concern that technology and AI will replace professional jobs.

I think we should be asking a slightly different question.

What should disappear from a planner's workload?

For example, how much time is spent searching through documents, repeatedly explaining basic rules, manually assembling property information, copying information between systems, producing routine maps and repeating assessments that somebody else has already completed?

Much of that work is necessary today because of the way our information and systems are organised.

But it doesn't necessarily represent the highest value a planner can contribute.

Now look at the other side of the slide.

What should become more important?

Spatial strategy. Policy development. Understanding urban outcomes. Interpreting evidence. Scenario planning. Integrated thinking. Community engagement. Treaty and Māori outcomes. Understanding cumulative effects. Strategic advice and professional judgement.

These are the areas where planning expertise really matters.

Technology can help us understand what is happening, where it is happening and potentially what might happen under different scenarios.

But deciding what we should do about it is a different matter.

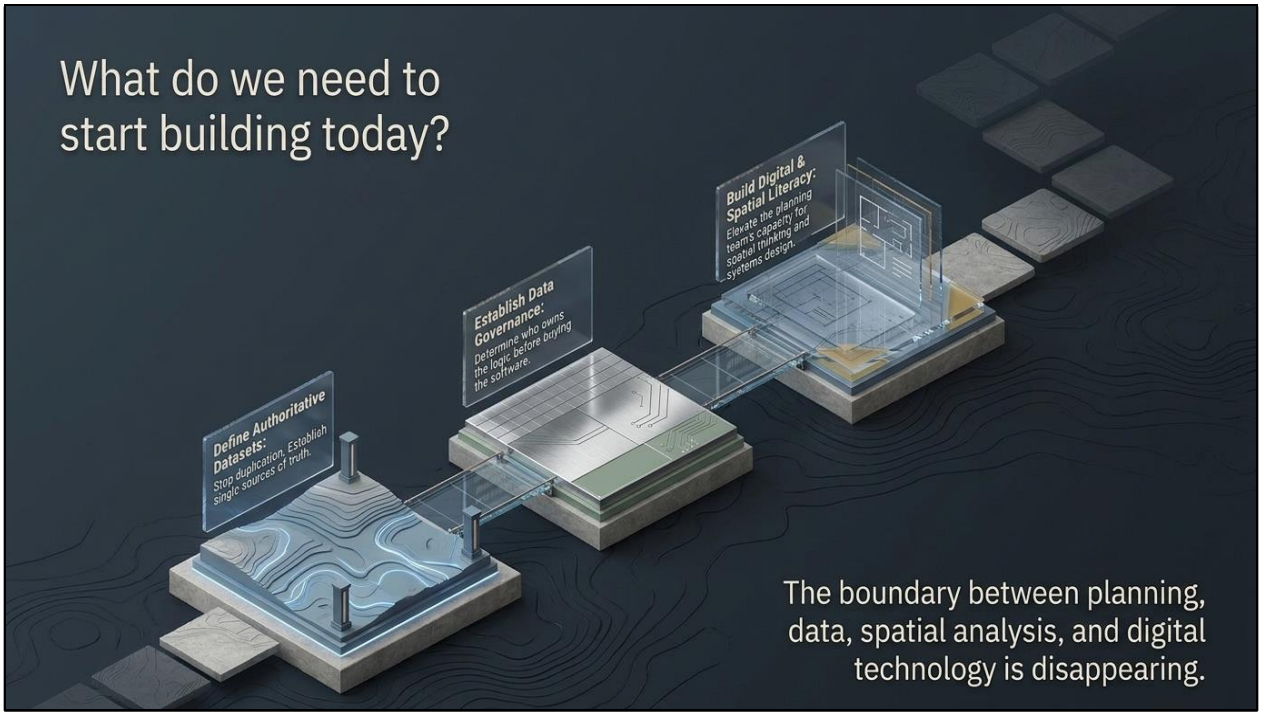
That involves values, priorities, trade-offs, community expectations and a consideration of long-term consequences.

Those things require human understanding and professional judgement.

So my proposition is quite simple:

Technology shouldn't replace planning expertise; it should remove the low-value work that prevents planners from applying it.

I think that's a much more positive way of looking at the future of the profession.



Closing Remarks

So, where does all this leave us?

What do we actually need to start building today?

I think there are three practical foundations illustrated on this slide.

First, **define authoritative datasets**.

We need to know where our information comes from, which datasets can be trusted, and how we avoid duplication and competing versions of the truth.

Second, **establish data governance**.

That means being clear about who owns information, who is responsible for maintaining it and how it is managed before we start investing in new software and systems.

And third, **build digital and spatial literacy**.

We need to equip planning professionals to understand and use these new capabilities, rather than treating spatial analysis and digital systems as something that belongs exclusively to technical specialists.

Ultimately, I think the boundary between planning, data, spatial analysis and digital technology is disappearing.

These things are increasingly becoming part of the same professional environment. And that's really the opportunity.

We can use technology to spend less time finding and assembling information, and more time understanding our cities, our communities and the decisions that will shape their future.

The future of planning isn't simply about putting today's planning system onto a computer. It's about rethinking how we plan, how we use information and how we make better decisions.

Retuning to earlier discussion about planning wisdom technology can enable us to connect evidence, understand relationships and make reasoning behind decision more transparent based on a balanced value set, experience and collective wisdom.
And with that Ill hand back to Hilary. Thank you