

Let's Talk Architecture and the One Digital Blueprint

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Today we will

- Share proposed **shifts** for '**Analogue to Digital**'
- Reflect on digital **past, present and future**
- Discuss co-designing the **digital blueprint**



Proposed three shifts enabling the '**Analogue to Digital**' mission

First shift to a **Person-Centred Architecture**

framing the target state as designed around people and pathways, not systems.


Second shift to **Digital Public Infrastructure**

positioning the national platforms, interoperability, and data services as the equivalent of “roads and rail” for digital health.


Third shift in the **Digital Operating Model**

clarifying national and local responsibilities, and what the “single operating system” means in practice.


Why?



Variable User Experience
Based KLASS survey



Limited Improvement
0.3/5.0
Digital Maturity Assessment



£4.5-£5.0Bn
Digital Spend
Model Hospital



Crowded Digital Landscape

Cyber and Resilience Vulnerabilities




10-Year Plan Aspirations



Commercial Challenges



Technology Advancements
(AI, Quantum)



Wider Government Digital Blueprint

#LetsTalkArchitecture (6 Month Conversation)

Simplifying the Estate

Making our national and local estates as simplified as possible in terms of common services provided once across many organisations.



Beyond Data & Interop



Standards should extend to usability, accessibility, and even commercial practices to address poor vendor behaviour.

Standards as the Bedrock



Unambiguous, mandated, and open standards are consistently cited as the fundamental requirement for a coherent and interoperable health and care system.



Continue Core Infrastructure Investment

Services like GP2GP, GP Connect, EPS, ERS, and the Microsoft agreement have delivered significant benefits and should continue to be invested in.



Enforcement is Key

Current standards exist but are not well-known or mandated, leading to suppliers exploiting the lack of compliance levers.



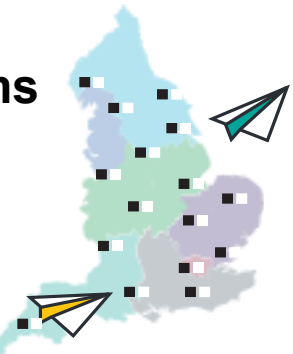
NHS App as a Single Experience



Continued investment in the NHS App, ensuring correct data architecture.

Review Legacy Systems

Address outdated systems (e.g., Kettering discharge summaries, legacy EPRs) that are barriers to modernisation and often not Spine compliant.






Supplier Value and Accountability



A need to hold technology companies accountable for adhering to standards and providing better value, potentially leveraging the NHS's collective buying power.

What does this mean for the system and suppliers?

Shift to:	System	Suppliers
 <p>Person-Centred Architecture</p>	<ul style="list-style-type: none"> ○ Digital services designed around people and pathways ○ Simplify the technology estate ○ Data and AI support for prevention and personalisation 	<ul style="list-style-type: none"> ○ Systems built for citizen journeys ○ Value shifts to innovation ○ Competition for better services
 <p>Digital Public Infrastructure</p>	<ul style="list-style-type: none"> ○ Core national services build once ○ Shared digital foundations ○ Freed up resources to focus on local priorities 	<ul style="list-style-type: none"> ○ Common foundation to innovate on ○ Level playing field for SMEs ○ Supplier focus shift to value-added services
 <p>One Digital Operating Model</p>	<ul style="list-style-type: none"> ○ Clearer roles and responsibilities ○ Spend controls and investment levers aligned ○ Stronger digital workforce 	<ul style="list-style-type: none"> ○ Procurement aligned with standards and assurance ○ Suppliers held to account for outcomes ○ Greater demand for co-delivery

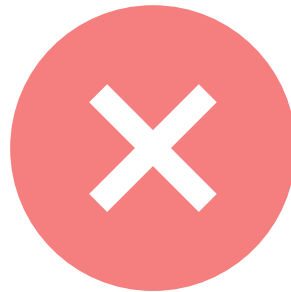
Discussion 1

- What would help you **communicate this vision** to your teams and customers?
- What's the one thing you need **clarified or changed**?
- What **barriers (cultural, contractual, technical)** stop us from adopting a more open ecosystem approach?

Digital Past, Present and Future

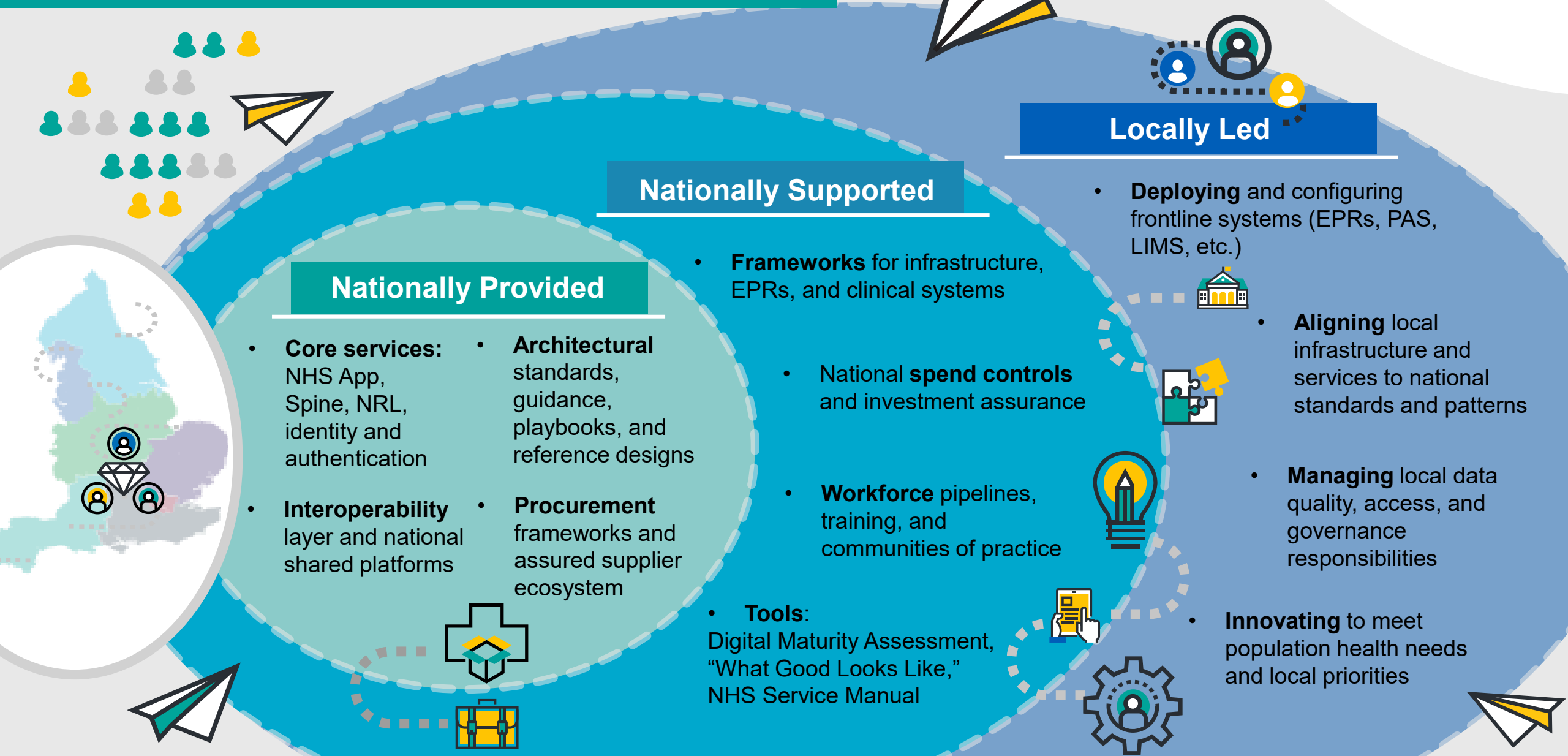


- **Core services & standards** – Spine, NHS App, NRL, FHIR, SNOMED, and NHS Number provided trusted foundations and a common language for systems and suppliers.
- **Procurement & market frameworks** – G-Cloud, EPR frameworks, and supplier assurance, supported SMEs, and improved safety and quality.
- **Guidance & Interop** – GP Connect, Shared Care Records, “What Good Looks Like,” and the Digital Maturity Assessment improved pathway connections and clarified improvement paths.
- **Spend controls** – ensured consistency in major investments.



- **Over-centralisation & infrastructure gaps** – some national solutions limited local flexibility; progress on identity, interoperability, and core data services has been uneven.
- **Procurement & market limitations** – frameworks still complex, and the supplier market remains concentrated with limited agility.
- **Digital workforce & standards adoption** – pipelines and communities underdeveloped; inconsistent standards enforcement limited interoperability.
- **Spend controls perception** – sometimes seen as bureaucratic rather than enabling smarter investment.

Who Does What? Nationally and Locally

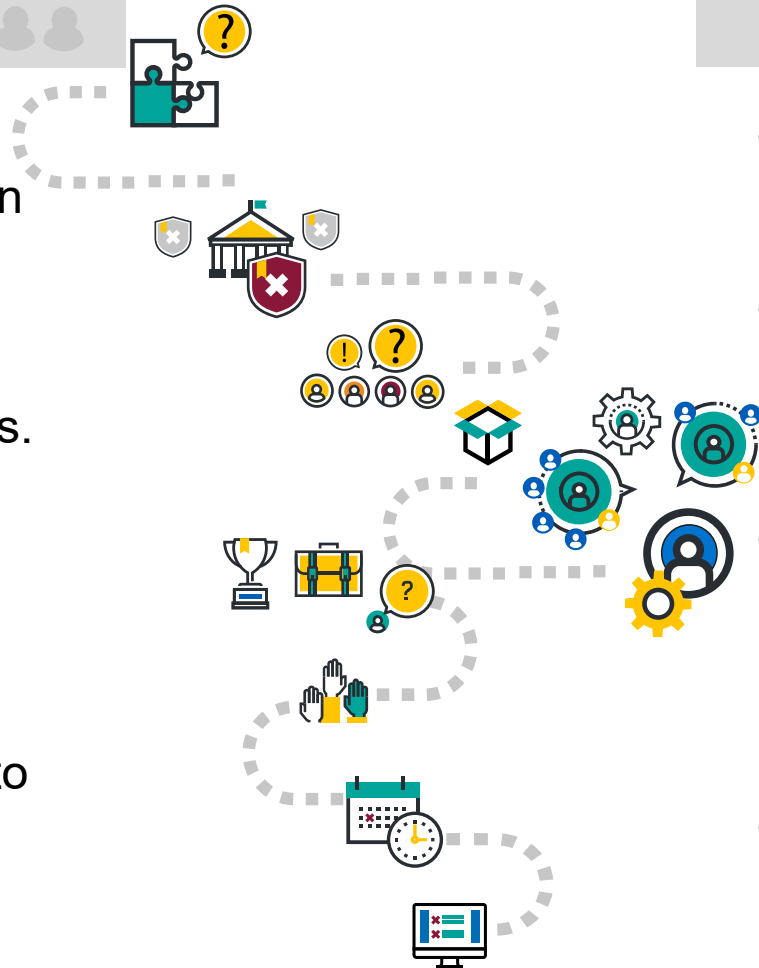


Commercial and supplier challenges and enablers

Current Challenges



- Over-reliance on large, monolithic contracts that lock in cost and stifle innovation.
- Supplier incentives often misaligned with NHS outcomes.
- Procurement fragmentation across organisations weakens leverage and consistency.
- Limited ability to pivot quickly to new technologies due to contractual complexity.



Key Enablers

- **Modular procurement:** break down large contracts into service capabilities.
- **Assured supplier frameworks:** pre-market engagement and accreditation against NHS standards.
- **Market reset:** clear message that suppliers must operate in an open, competitive, standards-based ecosystem.
- **Collaboration:** suppliers seen as partners in transformation, not just vendors.

Discussion 2

- Does the current **balance of “nationally provided, nationally supported, locally led”** feel right to you?
- How can we best support you in supporting us to raise **digital maturity without holding back** those who are more advanced?
- From your perspective, what’s the **single biggest frustration with procurement approaches**?

Co-Designing Digital Blueprint



What Good Looks Like



System
Guidance



Capabilities and
Architectural Blueprints
(Roadmap)



Digital Maturity
Assessment
(Usability & Productivity)

Who Does What?



Matrix
Nationally Provided,
Nationally Supported and
Locally Led



Spend
Control
Process



Market Management
Levers and
Frameworks

The Operating Model



NHS Roles and
Responsibilities
Service Manual



Centres of
Expertise



Talent and skills
(Pipelines and
Communities of Practice)

Discussion 3

- How do we **co-design the blueprint** to support the shifts?
- What **practical guidance, tools and support** would be helpful?
- How can **national teams support your product development** more effectively?

Closing Remarks

- Clear need for a **co-designed digital blueprint** to underpin the **10-year plan**.
- Need for **shift in our approach** to digital delivery to ensure **best value and better experience**.

Shift to Person-centred Architecture

framing the target state as designed around people and pathways, not systems.

Situation (Today's Problem):

- NHS architecture has historically been organisation-centric – fragmented around trusts, systems, and legacy estates.
- This makes care journeys harder to join up, increases duplication, and limits personalisation.
- Public expectations are shifting: people want seamless, personalised, and proactive care.

Target (Where We Need to Be):

- Prevention-first, personalised care that adapts around the citizen, not the organisation.
- Digital services that are consistent, intuitive, and inclusive across all settings.
- A technical foundation that supports scaling AI and advanced analytics to meet new challenges.

Actions (How We Get There):

- Simplify the NHS architecture and technology stack – reduce complexity, align to a clear target model.
- Add intelligence (AI and data-driven services) to support personalised care and future needs.
- Reimagine delivery of care in two dimensions:
 - *For the Public* – seamless journeys, single front door, personal health empowerment.
 - *With the Providers* – integrated workflows, consistent platforms, shared standards.
- Set national principles of “What Good Looks Like” and the capability model for future care delivery.

Shift to Digital Public Infrastructure

positioning the national platforms, interoperability, and data services as the equivalent of “roads and rail” for digital health.

Situation (Today’s Problem):

- Fragmented and duplicative platforms across the NHS and wider health ecosystem.
- Systemic issues with data access, standards adoption, and interoperability.
- Supplier market often driven by siloed procurement, limiting innovation and re-use.
- Public experience inconsistent, with variable access to digital services.

Target (Where We Need to Be):

- A big reset of the system: work with the market to build a shared layer of digital public infrastructure (DPI) for health and care.
- Treat data as a national asset – enabling secure, controlled use for care, planning, and research.
- Unlock innovation at scale by creating a fair, open, and standards-based ecosystem.
- Leverage DPI as the “roads, rail, and energy grid” for the digital NHS.

Actions (How We Get There):

- Define at macro scale how we will operate as an ecosystem to deliver the nation’s healthcare:
 - With the Public – consistent national services (identity, NHS App, messaging, records access).
 - With the Providers – shared interoperability, data services, and core capabilities to reduce local burden.
 - With IT Suppliers – open standards, modular contracts, and a market reset to drive innovation.
 - Across Government – alignment with UK DPI strategy, cross-sector data sharing, and resilience.
- Build and extend DPI capabilities (identity, interoperability, payments, trust frameworks).
- Establish governance to ensure DPI remains open, fair, and future-proof.

Shift to One Digital Operating Model

clarifying national and local responsibilities, and what the “single operating system” means in practice.

Situation (Today’s Problem):

- Fragmented and inconsistent resourcing models from procurement and supplier management to digital workforce capacity.
- Shortage of skilled DDAT resources across the system.
- Benefits realisation often weak due to unclear responsibilities and siloed approaches.

Target (Where We Need to Be):

- A clear, coherent operating model that defines national and local roles.
- A sustainable talent pipeline to attract, develop, and retain digital professionals.
- Consistent ways of working that deliver value and benefits at scale.

Actions (How We Get There):

- Re-define the operating model for digital, data, and technology:
 - For the Public – digital services delivered consistently, regardless of setting.
 - With the Providers – clarity on what’s delivered nationally vs locally, with shared accountabilities.
- Set principles for “Who Does What” across national, regional, and local levels.
- Strengthen spend controls and assurance to align investments with the target architecture.
- Invest in a smarter, more skilled operating model – with DDAT capability uplift, shared resources, and communities of practice.

Who Does What? Nationally and Locally

Nationally Provided

- Core citizen-facing and system services: NHS App, National Record Locator, Spine, and national identity solutions.
- Interoperability and shared platforms that enable information flow across organisations.
- National architectural standards, guidance, and service playbooks.
- Reference designs and national procurement frameworks that simplify adoption.
- An assured supplier ecosystem, ensuring compliance with standards and market confidence.

Nationally Supported

- Frameworks and models for infrastructure provision, aligned to “cloud and internet first.”
- EPR and clinical system frameworks that provide choice while ensuring consistency.
- National spend controls and assurance processes to guide alignment with the target architecture.
- Communities of practice, capability building, and talent pipelines for the digital workforce.
- Tooling such as the Digital Maturity Assessment, “What Good Looks Like,” and service manuals.

Locally Led

- Deployment and configuration of frontline systems (EPRs, LIMS, PAS, specialist solutions).
- Aligning local infrastructure and services to national standards and target patterns.
- Ownership of data quality, access, governance, and information security.
- Delivering innovation that meets local population needs while using shared platforms.
- Developing local partnerships with suppliers and adopting co-delivery models.

The blueprint supports us with:

- **Clear national direction** - over 1,000 stakeholders told us we need a single, consistent blueprint to guide investment, balance progress with legacy remediation, and give confidence across the system.
- **Internationally aligned standards** - open, global standards are essential to interoperability, patient safety, and addressing persistent challenges in the IT market.
- **Future-ready health system** - a blueprint enables us to meet the 10-Year Plan, consumer expectations, and the shift toward personalised, digital-first healthcare.
- **Support new models of care** - provides the digital foundations for neighbourhood teams, integrated pathways, and system reforms now underway.
- **Blueprint for government and market** - a coherent, authoritative plan that aligns government priorities, gives suppliers certainty, and helps the NHS act as one customer.

What does this mean for the system?

Shift to Person-Centred Architecture

- Care models and digital services are designed around people and pathways, rather than organisational silos.
- Local technology stacks become simpler and more standardised, guided by clear principles of “What Good Looks Like.”
- Data and AI are used responsibly to support prevention, early intervention, and personalised care.

Shift to Digital Public Infrastructure

- Core national services for identity, interoperability, and data reduce duplication and fragmentation.
- Shared digital foundations ensure citizens experience consistency wherever they access care.
- Freed-up resources allow greater focus on local priorities and innovation in service delivery.

Shift to One Digital Operating Model

- Clearer roles and responsibilities between national and local levels reduce duplication and inefficiency.
- Spend controls and investment levers ensure alignment to the target architecture and system priorities.
- A stronger digital workforce pipeline underpins consistent delivery of benefits across the system.

What does this mean for the supplier market?

Shift to Person-Centred Architecture

- Systems must be built for end-to-end citizen journeys, enabled by open APIs and interoperability standards.
- Value shifts from maintaining closed estates to delivering innovation on top of an open ecosystem.
- Competition is increasingly about enabling smarter, safer, and AI-supported services.

Shift to Digital Public Infrastructure

- DPI is a common foundation: suppliers cannot replicate it but must innovate on top of it.
- A level playing field enables SMEs and new entrants to compete with established incumbents.
- Supplier focus moves towards creating value-added services and advanced functionality.

Shift to One Digital Operating Model

- Procurement and contracts are aligned nationally with clear standards, governance, and assurance.
- Suppliers are held accountable for measurable outcomes, not just deployments or technology provision.
- Greater demand for co-delivery, managed services, and direct support for NHS digital skills growth.