

# Building a digital strategy

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**BOARDS**

# BUILDING A DIGITAL STRATEGY

## About us

This guide has been prepared jointly by NHS Providers and Public Digital as part of the [Digital Boards programme](#).

Through good practice sharing and peer learning, the programme aims to build board understanding of the potential and implications of the digital agenda and increase the confidence and capability of boards to harness the opportunities it provides.

Alongside [our guide series](#), a number of webinars and events are available to trust leaders, focusing on case studies of digital leadership in the NHS and other sectors along with practical take homes for boards. The programme is also offering free board development sessions on a bespoke basis to reflect the development needs of your organisation. To find out more [please contact us](#).

Digital Boards is being supported by Health Education England and NHSX as part of their Digital Readiness programme.



***The NHS is full of people with good ideas who want to do the best they can. This is about giving them opportunities, providing space and resources, and backing them to flourish. Don't be worried about not knowing the technology. As a chief executive you know your business. Get the right people around you to make it brilliant. What you do need, however, is a vision for your services, patients and staff.***

Louise Shepherd, Chief Executive, Alder Hey Children's NHS Foundation Trust

## About this guide

Across the provider sector, trust boards are reappraising their digital ambitions in light of the rapid changes made as a result of the COVID-19 pandemic. For many, this will involve refreshing or renewing their digital strategies, while others are starting afresh.

Some trusts have been fortunate enough to have secured funding for these plans – perhaps following several years of underinvestment – while others are having to manage within existing budgets.

**We've designed this guide for all board leaders:** from those directly involved in digital transformation, to others who have an oversight role and will review and approve digital strategies. All executive and non-executive board members should take responsibility for the digital strategy.

We recommend all board leaders read the first two parts of this guide: [What makes a successful digital strategy?](#) and [Questions for boards](#).

For those who want to understand the details, we've broken down each step of building a digital strategy into a standalone section.



***My chief executive's advice to me was to make sure I wasn't owning the digital strategy. It is the board who must own it. My role as chief information officer is to coordinate and draw together a collective view of where we're going as an organisation.***

Mandy Griffin, Chief Information Officer,  
Calderdale and Huddersfield NHS Foundation Trust

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# WHAT MAKES A SUCCESSFUL DIGITAL STRATEGY?

# 1

Based on their experience working with governments, corporations and large public sector organisations, the Public Digital team has compiled a list of key characteristics that indicate good digital strategy. We believe much of this can apply to the NHS.

## Signs of a good digital strategy

- **Integrated.** To succeed, digital transformation can't just be a bolt-on. Digital should be integral to system and trust-level strategies and business plans. It is an enabler for wider improvement.  
[Croydon council's digital strategy explains how it will enable the council's corporate plan, supporting six key themes.](#)
- **User centred.** Digital transformation should address the most important needs of patients, service users and staff.  
[The NHS Business Services Authority's digital strategy has put users at its heart.](#)
- **Useful to teams.** Digital strategies can't detail everything you're planning to deliver. Instead, focus on providing guiding principles to help people make the right decisions.  
[The Royal Borough of Greenwich settled on six principles that guide all their digital transformation.](#)
- **Mainstream.** The best strategies are widely understood and widely adopted. Successful digital transformation in healthcare depends on close alignment across many teams, not just the IT department.  
[In order to more effectively communicate their strategy, the Ministry of Justice published their digital strategy in the form of a blogpost.](#)
- **Realistic.** It is important to build trust – many staff have experience of being let down by the promise of new technology. Talk about what you've already delivered and set realistic goals.  
[The 2013 Government digital strategy is clear on the progress it intended to build on.](#)
- **Focused.** A good digital strategy is selective. Making trade-offs is difficult but essential to free up the bandwidth required for digital transformation.



*Our digital strategy is not defined by the services and the products that we deliver to millions of users every day. We don't mean a concentrated effort to deliver Robotic Process Automation (RPA), Artificial Intelligence (AI) or Blockchain across our services or any other hype tech of the moment. We may adopt some of these technologies, they may even be a by-product, but they are not our strategy.*

*We mean our culture, our practices and the processes we apply to create, manage and maintain our services. On the ground, this is 'lived' in how we talk about our services, how we behave and interact, the values that we work by and the thinking that drives our decision making when delivering services for our users.*

NHS Business Services Authority  
[www.nhsbsa.nhs.uk/our-digital-strategy](http://www.nhsbsa.nhs.uk/our-digital-strategy)

## Signs of a bad digital strategy

- **IT-driven.** Digital transformation is enabled by technology, but to truly succeed it needs to be led by chief executives, not chief information officers. Good digital strategy focuses more on outcomes for patients and staff than technical changes.
- **Cookie-cutter.** Learn from other organisations, but focus on the context of your trust and system and the needs of your users.
- **Focuses on unproven tech.** Cutting edge technology like artificial intelligence has huge potential in healthcare. But organisations should first prioritise fixing the basics, and a good digital strategy should be open about this.
- **Vague.** A digital strategy should set some clear, measurable objectives alongside a credible plan for delivering on them. The 'what', 'how' and 'when' – as well as the 'why'.
- **Too long-term.** Technology moves fast: there's not much point in trying to build a static 10-year digital strategy. Aim for a 1-5 year time horizon, aligned to your trust's strategic plan, with a constant review cycle built-in.
- **Reads like a wish list.** Good digital strategy acknowledges that it won't fix everything at once and certainly can't solve everyone's problems instantly. It should be clear what is being prioritised, and equally what isn't.

## QUESTIONS FOR BOARDS

## 2

We have suggested a short list of questions that board members – both executives and non-executives – may find useful to evaluate their trust’s digital strategy. The answers should prompt discussion and help those board members less involved to assure that the strategy is on track.

**1 How integrated are your digital and business strategies?**

You should have a clear vision for how digital will help to realise your clinical and operational objectives. Trusts with less experience of digital transformation may benefit from a separate digital strategy to focus on getting the basics right. Over time, trusts should aim for a more embedded approach to digital.

**2 Does your digital strategy have a succinct mission that is understood across the trust?**

For your digital strategy to succeed, you’ll need to engage your entire organisation in new ways of working. Having a simple, clear and consistent message about your digital aspirations will help. Everyone on the board should recognise this mission and understand what sits behind it. For example, Cumbria, Northumberland Tyne and Wear NHS Foundation Trust is known as the “**work from anywhere trust**” which is **repeated throughout their work**.

**3 Do you understand your users and their biggest needs?**

Your digital strategy should focus on fixing your biggest problems. All trust boards seek the views of their patients and service users, from patient stories at board meetings to floor walks across the organisation. Digital should be no different. Many boards are now looking at how they incorporate feedback about digital services – from both staff and service users – to identify the pain points and problems their digital strategy needs to solve. This will require boards to put equality, diversity and inclusion at the heart of their approach.

**4 Do you know what digital services you are operating and how they are performing?**

It is important for the board to understand where the trust is on its digital journey. This requires an awareness of existing digital services, what volumes they are operating, how they are performing, how they relate. This will help give you a clear view on what you need to fix, and – crucially – where to start.

**5 What are you *not* prioritising in your digital strategy?**

The NHS is facing huge challenges over the coming years, and many trusts lack the funds to make large investments in digital transformation. Your digital strategy will need to be clear about the trust’s priorities and any trade-offs. Board members will want assurance that the strategy’s ambitions are achievable and understand what has been de-prioritised to free up capacity to deliver on its priorities.

**6 Have you committed to realistic and tangible actions?**

The best strategies turn ambitions into firm commitments with clear ownership. Chief digital officers/chief information officers and chief clinical information officers have an important coordinating role to play, but successful digital transformation requires ownership by clinical and operational leaders.

**7 How will you know if your digital strategy is working?**

Effective strategy relies on strong feedback loops. It will be important to set up the right checkpoints and identify some indicators that will help you understand whether your strategy is working, and where you need to change course.

**8 Can you explain how your organisation’s digital strategy aligns with your system strategy?**

**NHS England and NHS Improvement has placed digital at the heart of system working.** Each trust board will need to collaborate with system partners to set a shared vision for digital and agree how to deliver joint initiatives like the shared care record that will help drive the best outcomes for the population.

**9 How will your organisation change to enable digital transformation?**

Digital ways of working can run against the grain of how large organisations operate. Think about how your planning cycles, incentives, finance and governance processes may need to change to enable a more agile way of working.

**10 What could go wrong?**

From project failure to cyber security incidents and outages, it is inevitable that some things will go wrong. Board leaders should make sure the right systems are in place to reduce these risks and promote a culture of learning, not blame. As digital becomes more important to the delivery of care, this is a patient safety issue.



*My advice to other chairs is threefold. Firstly, you need to understand your starting position, but in a pragmatic way. Don’t get pulled down particular rabbit holes. You can only understand your future position if you are aware of your tether. Secondly, you need to keep things simple. Focus on doing the basics well, and don’t get side-tracked by shiny new things, or lots of bespokeing. Finally, and most importantly, make sure the strategy focuses on improving the most things for the most amount of people.*

Liam Coleman, Chair, Great Western Hospitals NHS Foundation Trust

Ownership of the digital strategy sits with the board, rather than a single board member. However, for those board leaders much closer to building the strategy, we have provided more detail on specific stages of development. This starts by making the case for investment, and understanding the context your trust and system operate in. Understanding your users and mapping your existing services is then fundamental to laying the foundations for good digital strategy. Once this work has been done, your strategy should set out its approach to technology and a framework for making choices and setting actions. Finally, we set out the next steps on turning strategy into delivery.

## WHY INVEST IN DIGITAL?

Today's NHS is wrestling with three demand-side challenges:

- **Capacity**  
Whether in the form of land, capital, or staff there is an ongoing challenge of managing resources across these areas to find balance.
- **Efficiency**  
To manage capacity constraints new forms of efficiency need to be found. This may be in the form of productivity gains – doing more with less. Or load balancing where increasingly hard to find skills can be easily deployed across a wider area.
- **Paths to new models of care**  
Trusts also need to manage reconfiguration of local services in line with national and local policy agendas such as integrated care systems (ICSs), or alongside primary care networks.

Digital can support NHS providers to meet all of these challenges. However, this can only be achieved by delivering good digital services with high levels of take-up. Without this, the NHS will neither meet the raised expectations of patients and staff or deliver the financial benefits of digital transformation.

Here are three important reasons to invest.

### 1. Digital can help us achieve the triple aim of better health, better care, lower cost

Better Health	Better Care	Lower Cost
<ul style="list-style-type: none"> <li>● Improved clinical safety</li> <li>● Identifying illness sooner</li> <li>● Fewer medication errors</li> <li>● Improved infection prevention</li> <li>● Better clinical decision making</li> </ul>	<ul style="list-style-type: none"> <li>● Finding records and documentation more easily</li> <li>● Right help first time</li> <li>● More consistent practice</li> <li>● Clearer discharge summaries</li> <li>● Better compliance with advice</li> <li>● Improved audit trail</li> </ul>	<ul style="list-style-type: none"> <li>● Channel shift (fewer phone calls, less paper)</li> <li>● Better deals with suppliers</li> <li>● Switch off legacy systems</li> <li>● Greater efficiency</li> <li>● More cost-effective diagnostic testing</li> <li>● Easier compliance with national standards or schemes</li> <li>● Increased clinic utilisation</li> <li>● More effective bed management</li> </ul>

## 2. Digital is essential to meet people's raised expectations

Patients and clinicians are not just patients and clinicians: they are consumers of many other services. The digital transformation that has revolutionised other service sectors has raised people's expectations, and increasingly they are demanding more from the NHS.

This is evident in the growing number of people downloading [the NHS app](#), ordering [repeat prescriptions online](#) and [accessing NHS 111 online](#). And it's been clear for some time that patients increasingly want a single place to [access their own, up-to-date health records](#).

We can see raised expectations in the clinical community in the rapid adoption of consumer technologies like WhatsApp in clinical settings. The ability to communicate in a simple, instant and mobile way was seized by clinicians previously hamstrung by out-of-date systems for sharing information.

A new generation of digitally native clinicians and patients will continue to demand more from the NHS. Without investment this expectation gap will grow, and 'shadow IT' will continue to serve the needs that organisations fail to address.

## 3. You can't afford not to

Providing safe, integrated care *without* investing in digital is increasingly difficult. From prescribing systems that check for drug interactions to data analytics that enables effective demand planning, digital is a critical part of trust operations. Regulators, leaders, patients and staff alike are demanding a minimum level of digital infrastructure in trusts.

As digital becomes a bigger part of how trusts operate, costs associated with digital increase. A common argument for digital is "invest to save". However, in his 2016 report [Making IT work](#), Bob Wachter set out the challenge of seeking short-term financial returns from digital in healthcare:

*"Experience has shown that the short-term ROI is more likely to come in the form of improvements in safety and quality than in raw financial terms. In fact, cost savings may take 10 years or more to emerge (the so-called 'productivity paradox' of IT), since the keys to these gains are improvements in the technology, reconfiguration of the workforce, local adaptation to digital technologies, and a reimagining of the work."*

If you invest only in technology without also investing in changing your teams, business processes, and operating model, the investment may be wasted. [Salisbury NHS Foundation Trust's digital strategy makes explicit reference to the culture shift required](#) across the organisation.

# UNDERSTAND THE TRUST CONTEXT

# 4

Trusts need to set digital strategies that will give their teams a north star to aim for, and **principles that will help them make decisions in an ever changing environment.**

Creating a meaningful digital strategy takes time. As with any strategy, it must speak to the real and unique challenges facing your organisation, your system and the population you serve.

## Trust strategy

Your digital strategy should be closely aligned with your trust’s core strategy, including your clinical strategies.

In fact, the best digital strategies are the ones that are embedded in the strategy of the organisation, its teams and staff. Many ‘digitally native’ organisations don’t have a separate digital strategy or digital team – **it is simply how they operate.**

Depending on a trust’s digital maturity, it could make sense to start with a standalone digital strategy – it is often the best way of focusing organisations on this agenda. However, it is critical to **keep a close connection with the trust strategy.**

Boards will want to reflect on how well integrated digital transformation is within your corporate strategy and plans.

Absent	Siloed	Embedded
<ul style="list-style-type: none"> <li>No mention of digital in business strategies or plans</li> </ul>	<ul style="list-style-type: none"> <li>Tokenistic mention of digital in business strategies and plans</li> <li>Separate strategy, projects, budgets and objectives for digital</li> <li>Weak link between digital and overall trust objectives</li> </ul>	<ul style="list-style-type: none"> <li><b>Digital at heart of business strategy</b></li> <li>Digital transformation plays a key role in delivering corporate objectives</li> </ul>

## Trust performance

Before embarking on your digital strategy, it is worth reflecting on the current performance of the trust, both in terms of digital but also more generally. Your performance data can tell you a lot about the services most in need of redesign and the biggest opportunities to use digital to improve the patient experience.

For example, an audit at Sherwood Forest Hospitals NHS trust found **significant error rates in paper based early warning scores.** The trust used these findings as a case for change to introduce e-observations, which has since reduced the error rate to zero.

There is no standardised way to measure the performance of your digital services. However, it is worthwhile thinking about some **metrics that you could start to track**, set goals and report on.

For example:

- percentage of digital take up
- cost per transaction/per user
- user satisfaction
- **failure demand** e.g. time to respond to patient contacts.

These types of metrics can be useful as leading indicators of success, but they are a means to an end, not an end in themselves. Close alignment between your digital and core strategy should ensure success is measured in terms of quality of care, patient outcomes and staff satisfaction. The North Lincolnshire and Goole NHS Foundation Trust digital strategy sets out **how they are combining these metrics to articulate their vision for 2025**.

## Constraints

Your strategy should take into account the constraints you're working within that may have a significant impact on your digital transformation approach. It should be recognised that trusts will have very different starting points:

### **Funding**

This is often the main barrier to digital transformation and can feel insurmountable for some trusts. The scope of your strategy should align with your reality.

### **Digital skills**

Digital transformation necessitates a new set of skills and an empowered, empowering culture. This is explored in more detail in our [previous guide](#).

### **Physical infrastructure**

You may have a hospital estate that makes the installation of reliable WiFi impractical, or an outdated data centre and network that requires urgent investment. This may take first priority.

### **Data infrastructure**

Without reliable, standardised data and ways to share data between systems, the task of digital transformation in healthcare becomes even more difficult. Understanding your interoperability needs and ensuring your suppliers can support them is critical.

## COVID-19

A key part of the context for any digital strategy refresh will be taking stock of the enormous changes brought about by COVID-19. Across the NHS, the pandemic fuelled **years' worth of progress on digital transformation in a few weeks**. Trusts have rapidly delivered digital alternatives to face-to-face interactions, improved data sharing and new ways of working.

The sector's response to the pandemic has provided boards with **greater clarity about what it means to be digital**. COVID-19 has accelerated three emerging trends:

- Pace: autonomy and authority has been delegated to teams delivering change.
- Purpose: the NHS rallied around a clear, unifying goal that has focused minds and generated greater willingness to do things differently.
- Priority: digital has been thrust into a central role supporting the trust's activities.

All of this has underlined how much digital transformation is not fundamentally about technology: it requires an environment where people have the freedom and support to innovate across the usual professional and organisational silos. Board leaders will want to reflect on the profound cultural changes that have occurred within their organisations and ensure their digital strategy builds on this momentum.

***Fairly early on during the pandemic, the board recognised the trust had historically viewed 'IM&T' as an overhead that needed to be managed. But now they saw 'digital' as a key enabler for service provision. We collectively agreed to signal a line in the sand through our digital strategy. Our approach to digital transformation has fundamentally changed for good.***

Chris Bird, Executive Director of Partnerships, Strategy and Digital,  
North Staffordshire Combined Healthcare NHS Trust

# UNDERSTAND THE SYSTEM CONTEXT

# 5

Digital is central to the development of integrated care systems (ICSs). Meaningful integrated care is not possible without the infrastructure of shared care records, interoperability and staff mobility.

NHS England and NHS Improvement have set clear expectations for ICSs on digital, including:

- a named senior responsible officer for digital on the ICS board
- developing a shared care record to connect health and care services
- building the **digital literacy of the workforce**
- developing cross-system analytical capability to drive better decision making
- developing a road map for citizen-centred digital channels and services.

All of this will need to be underpinned by a system-wide digital transformation plan. These plans will need to build on the legacy of the **local digital roadmaps**. Work on these is already underway, as organisations look to start by agreeing **shared principles**.

Organisations within an ICS will be starting from different starting points in terms of their digital maturity. The goal is ubiquitous digital capabilities across the system, consolidation of services and eventually the frictionless movement of staff, all of which will accelerate the scale of innovation.



***We knew how debilitating it is for patients and professionals to keep asking for the same information across our patch. This is what drove us all to the local health and care record. We knew we couldn't get everyone to change their existing systems. So instead we went for open systems and open platforms.***

Louise Shepherd, Chief Executive, Alder Hey Children's NHS Foundation Trust

As these system-wide strategies evolve, trust boards will need to work with their ICS partners through a range of topics to ensure alignment:

- **Decide what your trust should focus on and what should be done at system level**  
Where does your ICS digital transformation plan overlap with your trust digital strategy?
- **Decide how you will agree investment priorities across your system**  
What funding is available to the system and where is investment needed most, given the very different levels of digital maturity across health and care partners? How will funding flow through the ICS to place, provider level and individual services?
- **Agree collective action to ensure digital technologies redress rather than reinforce inequalities**  
[How are you working with your local Healthwatch](#) and other patient/public engagement forums to ensure the needs of all people are being addressed? How does your trust and system strategy [address the risk of deepening digital exclusion](#)?
- **Understand how the patient experience will change**  
Will you continue to operate multiple websites, apps and patient portals, for different services provided by different organisations? Or should there be a single place to go?
- **Identify opportunities for digital to break down silos between organisations**  
[Sharing data](#), communication systems, WiFi and information governance standards are critical to closer collaboration. Is your trust [able to share any of its tools and capabilities](#), not just with other NHS organisations but also local authorities, non-NHS providers and social care providers?
- **Agree your interoperability priorities**  
Which are the most important data flows that you should focus on first? What tools and capabilities are available within your system so you can begin to address these?
- **Deliver and use the shared care record**  
The purpose of these records is to ensure health and care staff have access to the right information at the point of need, improve access for patients and service users to better manage their own needs, and support the move towards whole population health.  
[Make sure you understand the fundamentals.](#)
- **Agree what capability should be built at a system level**  
Some ICSs are recruiting digital teams that will work across the system and enable effective joined up delivery and help avoid duplication. How are system partners pooling resources and capabilities?
- **Agree an effective governance model for cross-system working**  
It is tempting when faced with system complexity to introduce more hierarchy and process as governance. This can slow you down compared to [more agile forms of governance](#).

*You need to back those in your system who are further behind on the agenda. Everyone needs to level up and chief executives must be honest about this. At Alder Hey we've supported the fast follower initiative and have worked constructively through the Health System Led Investment (HSLI) programme to ensure investment goes to areas that need it most in order to get organisations up to speed.*

Louise Shepherd, Chief Executive, Alder Hey Children's NHS Foundation Trust

*At a system level, my role as a trust chair is to ensure that we are focused on realistic solutions that are manageable. When working with other organisations, you must be disciplined about the scale of the ambition and make sure it is genuinely deliverable. The agenda can very quickly get too big. I work with other trust chairs to manage the key disagreements and broker the way forward.*

Liam Coleman, Chair, Great Western Hospitals NHS Foundation Trust

#### FURTHER READING

- [On the day briefing: The Department for Health and Social Care's legislative proposals for a Health and Care Bill](#)
- [On the day briefing: Legislating for Integrated Care Systems](#)
- [What do NHS England's integrated care system plans mean for digital transformation?](#)

## MAP YOUR SERVICES

Understanding what services your trust provides, and how these interconnect, is a critical step in building your digital strategy. All trusts usually have an A-Z list of services on their website which provides a great starting point. Mapping out your existing services will help you understand what is working well, what you need to fix, and – crucially – where to start.

Services in healthcare are a combination of:

- **Transactions** like booking, referring, notifying, testing and prescribing.
- **Care** like consultations, hospital admissions and operations.
- **Pathways** that direct patients to the right services and treatments.
- **Technology** that underpins services.
- **People and organisations** that deliver services.

Providing integrated care requires a holistic view of services across your system.

The Ministry of Justice **mapped all the services** provided by the department and its 30 agencies and public bodies, **publishing the results online**. They found 226 services, of which only 54 were digital services and only 27 of those met government digital standards.

Building a list like this will help you identify where you can have the biggest impact. The process itself helps you find gaps and opportunities to inform your strategy.

Key information to capture includes:

- **Volumes:** how many times is this service used each year?
- **Cost per use:** how much does it cost to provide this service?
- **Quality:** how good is the service?
- **Digital take-up:** what percentage of the volumes are delivered digitally?
- **Ownership:** who is accountable for running and improving each service?
- **Opportunity:** is this a service that could benefit from digital transformation and improvements in patient experience?

Building a strong understanding of the services your trust provides will help you set clear priorities in your digital strategy, giving some tangible examples of what will change for patients and staff through digital transformation.



***You need to find a balance between digital transformation and simple digital redesign. There is no point talking about 2025 when people are frustrated with 2021 issues. You have to fix the ‘pebbles in the shoes’ in order to get buy-in for the truly transformational work. But in your strategy, position your benefits as outcomes rather than transactional KPIs.***

Chris Bird, Executive Director of Partnerships, Strategy and Digital,  
North Staffordshire Combined Healthcare NHS Trust

FURTHER READING

- [Metrics that matter and user research](#) by Ben Holliday
- [Measuring success: How to use data to improve your service: measuring, reporting, analytics tools and techniques.](#) Government Service Manual.

## UNDERSTAND YOUR USERS

Mapping your services helps you understand what you currently provide. But doing this alone risks a narrow, organisation-centric view. You could end up re-creating the same services on top of modern technologies.

The best protection against this is to look at your organisation from the outside-in, grounding your digital strategy in the real experiences of patients, clinicians and carers.

It's essential that those leading strategy development spend time understanding the needs of your users. This is even more true now as more patients are changing the ways they interact with the health service, for example by accessing virtual consultations or requesting their own data.

It isn't a new concept for the NHS: all trusts have established ways of bringing patient and service user views to the board. And **trust leaders are now committing to get closer to the digital experience of their users**, too.

### Principles

- **Reach beyond the usual voices.** Good user research can't be done by listening to expert patients or clinical informaticians alone. **Don't underestimate the importance of user research skills.**
- **Check your bias.** It can be tempting to assume you know what patients or clinicians need, particularly if you have been one. However, this can be a dangerous assumption: those involved in developing digital strategies are atypical.
- **What people say they want is not always what they need.** It is better to observe how they work, understand their lives and listen to their frustrations.
- **Think about *all* your users.** Thinking about your mainstream users vs those with more specific and unique needs can be a good way to test your digital strategy. This **short guide from IDEO** can support your thinking.

### Approaches

- **Use existing data:** like friends and family test results (especially write-in answers), complaints and staff survey responses.
- **Go to the 'gemba':** spend time shadowing, visit wards and try to use IT systems yourself.
- **Interviews:** a small number of user interviews and focus groups will often give you insights you won't get from surveying thousands.
- **Diversity and inclusion:** ensure you are speaking to all parts of the communities you serve. As an employer make sure you **build diverse and inclusive teams** by reviewing recruitment practices, connecting with **new networks** and seeking new ideas. The NHS's **Widening Digital Participation** programme can provide more advice.
- **Go deep in one or two areas:** you won't be able to do detailed research across all areas of your trust, but it is helpful to explore a couple of domains in more detail.



*During the development of our digital strategy I kept walking in the shoes of a newly qualified staff nurse on a Monday morning: would the strategy be meaningful to them? Will it mean they have access to equipment, health and wellbeing support, and the right training? If they have an innovative idea, how will they let people know, and are they in the position to have this discussion? This is how I made it feel real.*

Gill Green, Director of Nursing and Governance,  
Greater Manchester Mental Health NHS Foundation Trust

#### FURTHER READING

It does not necessarily have to be expensive to undertake user research, advice on how to do so can be found in [books](#) and [blog posts](#). To get a broader view of your services and policy challenges there are a range of [techniques](#) you can use like journey mapping.

# DECIDE YOUR APPROACH TO TECHNOLOGY

# 8

To thrive in the internet-era, every organisation needs to be good at technology and data. Your trust's approach to this can make-or-break your digital transformation. That means as a leader, you need to be comfortable with making decisions about technology. This doesn't require a technology background, but you should at least be aware of the wider considerations.

Here are some pointers to guide your approach to technology:

- **Use of technology should be meeting clear outcomes.** No technology decision is ever perfect – there will always be pros and cons. The clearer your understanding of your users' needs the better your technology choices will be.
- **It is possible to test whether it works.** It is better to test the system with your users live before financially committing for the long term. Be sceptical of vendor demonstration theatre.
- **Prioritise switching things off.** An excellent test of a successful digital strategy is whether you have been able to retire your legacy technology.
- **Make sure that every tool has a team.** Even when you are not building services but are buying commoditised tools it's important to: understand users, establish feedback loops, understand the market, and ensure the tool is meeting needs. This requires ongoing product management and support on the business side (as well as supplier).

## Building or buying

One of the most common decisions to make as a leader is how to source your technology. Here are some quick views on when each approach should be considered. Most organisations end up doing a blend of both *build* and *buy*.

When to build	When to buy
<ul style="list-style-type: none"> <li>● High levels of uncertainty around user needs</li> <li>● More control needed e.g. over user experience or data</li> <li>● Point solutions e.g. specific solution needed for specific problem</li> <li>● Few market providers – risk of lock-in</li> <li>● Impact outweighs potential costs of ongoing support</li> </ul>	<ul style="list-style-type: none"> <li>● When needs are well understood</li> <li>● When products are highly commoditised with low variability</li> <li>● Vibrant market – easier to switch suppliers</li> </ul>

Lack of in-house skills is often the main reason why *buy* decisions are made. However, this lack of capability can also prevent you from being an intelligent customer for technology services. Our previous guide, *Building and enabling digital teams*, set out how trusts can develop the inhouse digital capability they need.

#### FURTHER READING

- 18F the digital delivery unit for USA's federal government has produced a [guide](#) for executives who are overseeing technology projects and providers best practice for budgeting and overseeing technology projects.
- There are many frameworks for guiding choices on technology. Perhaps the best known in the UK public sector is the [Technology code of practice](#), a set of criteria to help government design, build and buy technology.
- [Wardley mapping](#) is a technique to help you make technology choices.
- [Every tool needs a team](#) – why even commoditised tools need ongoing support.

## DECIDE WHERE TO START

A common challenge organisations have when embarking on digital transformation is figuring out where to begin. Often, there are no shortage of problems to fix or opportunities to seize.

It can be tempting to spend time researching, assessing and prioritising all these opportunities. However, this can sometimes lead to 'analysis paralysis'. It's often better to just get started on something, rather than trying to conduct a comprehensive prioritisation. This will emerge over time.

A good approach is to pick a small number of areas – exemplars – where you can:

- **Build consensus.** It'll be much easier to make progress if there is wide agreement that these are the right priorities.
- **Deliver real value in less than six months.** This is critical to build momentum. Find areas with high levels of engagement and no 'show-stoppers' like insurmountable information governance issues.
- **Learn from the experience.** It helps if the exemplars are representative of the kind of problems you're trying to solve.
- **Make a real impact.** Exemplars should focus on things that matter to patients, clinicians and stakeholders.

Crucially, your exemplar should be in a part of your trust that wants to change and try something new. It is likely there will be a number of exemplars from your organisation's response to COVID-19. As a board, it is important to promote these successes internally and externally and apply the learning across the trust.

## MAKE CHOICES

Making choices is key to good strategy. Strategy is about what you're not going to do as much as what you are going to do. This may involve saying 'no', disappointing stakeholders, turning things off or reversing previous decisions.

### Your digital strategy shouldn't be a comprehensive plan

The main objective of your digital strategy is to set direction, not to outline every element of your transformation plan. Planning and prioritisation is an iterative process, not something that you can do entirely upfront.

However, your strategy is a great place to show *how* you will prioritise. A good way to do this is to give examples of what your trust will and won't do.

### How much bandwidth does your organisation have?

It is important to understand how many different projects your trust can run simultaneously. This will be constrained not just by the number of digital and project delivery specialists you have, but also by the demands that multiple projects will place on central functions and health care professionals.

Your strategy should identify your bottlenecks. For example, it could be information governance support, data analysis skills or funding availability. Will you address these constraints, or limit the number of initiatives you are planning?

### What decisions have already been made?

Some choices may be constrained by decisions that have already been made:

- major programmes in flight
- existing funding commitments
- organisational changes
- policy and regulatory changes
- ICS plans and agreed partnership workings
- previous commitments
- existing contracts.

Many of these will be difficult to change. However, sometimes it may be better to stop a failing project and try a different approach, even if this means writing off sunk costs. Developing your digital strategy is a good opportunity to ask these critical questions and – where it makes sense – change course.

## Approaches to prioritisation

- **Think about value and effort**

There are different approaches to prioritisation, but most of them involve an assessment of the relative value and delivery effort of each project.

- **Mixed portfolios**

There's no one-size-fits-all approach to transformation. Portsmouth Hospitals NHS Trust's strategy **categorises their digital initiatives into *maintain, improve and transform***, with different treatments for each. It's worthwhile thinking about the split between core initiatives and experiments, too. Core initiatives have a high likelihood of success and a wide impact e.g. implementing a system that has been tried-and-tested at similar trusts. Experiments are riskier innovation initiatives but may offer high reward if they succeed.

- **Sequencing**

Some things will need to be done in sequence – for example, building infrastructure to enable future work. Where possible, though, you should try to avoid building too many dependencies as this will slow down delivery. Think about what should be done in parallel.

- **The prioritisation process can be as important as the outcome**

Discussing and agreeing priorities is a valuable activity: it forces a conversation about what really matters and builds consensus. To get the most out of this, involve a mix of disciplines in the prioritisation process: technologists, clinicians, executives and service managers.



***The reality is that you have limited resources which means you can't deliver all the big ticket digital items different services may be asking for. In our digital strategy we included a metric that scored each digital proposal in terms of patient, staff and financial benefits. This will inform our business case pipeline and we're working with our divisional directors to ensure they own each priority.***

Mandy Griffin, Chief Information Officer,  
Calderdale and Huddersfield NHS Foundation Trust

Calderdale and Huddersfield NHS Foundation Trust's investment prioritisation matrix as set out in their digital strategy 2020-25.

**NHS**  
Calderdale and Huddersfield  
NHS Foundation Trust

### Investment Digital Aspirant Prioritisation

Scan4Safety the allocation of funding has been provisioned

Case Study	Description	Patient Benefits (50%)	Benefits				Total	
			Score	Staff Benefit (25%)	Score	Financial Benefit (25%)		Score
<b>Voice Recognition</b>	The ability to use Voice Recognition to input speech into clinical systems and non clinical systems	Enriched patient record by enabling clinicians to enter information at the time of consultation	<b>8</b>	Reduction in staff completing administration duties creating future capacity for increased demand	<b>4</b>	Limited financial saving however improvements in quality	<b>2</b>	<b>70%</b>
<b>e-Consent</b>	To digitise the documentation of a patient's informed consent prior to an investigation or treatment is undertaken	Streamlined digital process for patients along with a standardise approach to consent	<b>8</b>	Reduction in administration duties of handling paper time and making the environment safer for clinicians to work in	<b>3</b>	Reduction in cost saving attached to printing and scanning costs.	<b>3</b>	<b>70%</b>
<b>EMIS/Cerner Interface</b>	Interface between prescribing system (EMIS) and Electronic Patient Record (EPR)	Reduction in risk of adverse drug events occurring by removing dual entry into systems	<b>8</b>	Safer environment for clinicians to work by removing transcribing between two systems	<b>4</b>	Reduction in administration costs for the organisation releasing time to care	<b>3</b>	<b>75%</b>
<b>Wi-Fi</b>	Refreshment of Wi-Fi Infrastructure	Patients ability to connect	<b>8</b>	Continuation of service	<b>4</b>	Reduction in deployment	<b>3</b>	<b>75%</b>
<b>Closed Loop</b>	Enabling Closed in Medical Management and Administration	Increased safety for patients as all elements are connected	<b>10</b>	Safer environment for clinicians to work	<b>5</b>	Reduction in errors	<b>3</b>	<b>90%</b>
<b>Cardiology</b>	Interoperability within the Cardiology Suite of systems	Seamless interaction for all Cardiology Suite of Systems	<b>9</b>	Able to access information	<b>6</b>	Effective utilisation of clinical systems	<b>3</b>	<b>90%</b>
<b>Network/ Infrastructure</b>	Refreshing the organisation network is secure and high performance	All medical systems /hardware are on the latest network	<b>7</b>	Systems/Equipment working at optimal performance for staff to complete duties	<b>7</b>	Reduction in time wasted	<b>4</b>	<b>90%</b>
<b>Agile Working</b>	Supporting agile working for the workforce	Reduction in non-clinical staff onsite supporting social distancing	<b>6</b>	Enable to effectively, safely wok from home	<b>5</b>	Less reliance on the hospital estate	<b>5</b>	<b>80%</b>

FURTHER READING

For more advice and inspiration on prioritisation there are lots of resources online but comprehensives guides can be found at:

- [How to prioritise](#) by Product Coalition
- [Ways of working](#), a short guide to prioritisation by Public Digital
- [20 Product prioritization techniques: A map and guided tour](#)

## SET ACTIONS

The digital strategy should set out *what* you will deliver, as well as *why* and *how*. That said, a digital strategy can't be a comprehensive delivery plan. It should provide direction over detail.

A good middle ground is to make some clear commitments that will build confidence in your strategy. Equally, breaking those commitments is a sure-fire way to diminish confidence.

Good commitments are:

- **Tangible**  
Commitments should be specific and meaningful to everyone. Don't set vague aspirations or use insider jargon.
- **Measurable**  
How will we know when you've succeeded? What will change for your users? What impact will it have on your KPIs? Public Health England has set out a clear [matrix for how they will measure success of their digital strategy](#).
- **Outcome-focused**  
Don't tie yourself to specific solutions or technologies until you've proven this is the right approach. Instead, focus on the outcome you want to achieve. [Sussex Community NHS Foundation Trust set out a clear plan focused on outcomes](#) in their digital strategy.
- **Realistic**  
Don't overcommit. Set realistic goals as steps towards your mission.
- **Time-bound**  
Digital transformation is hard, and so is forecasting when things will be delivered. However, it's important to set down milestones to aim towards.
- **Limited in number**  
Don't make too many commitments. Keep it to a short, meaningful list that your teams and stakeholders can comprehend and buy into.

### FURTHER READING

Roadmaps can be an invaluable tool in communicating your digital priorities. For further advices on developing roadmaps see:

- [Seven questions to build a roadmap](#) by Jamie Arnold
- [10 tips on creating an agile product roadmap](#) by Roman Pichler
- [Effective product roadmaps](#) by Melissa Perri

## FROM STRATEGY TO DELIVERY

## Communicate clearly

A good digital strategy is clear, concise and catchy. If you do this well, you'll build a shared understanding across your trust (and beyond) about what you're doing and why.

You'll need to develop different versions of the strategy:

- At a minimum your strategy should be published in the open on the web, as [Surrey and Borders Partnership NHS Foundation Trust has done](#).
- Government Digital Service helped explain their approach by creating [posters for corridors](#).
- Holding [presentations and discussion sessions for staff](#) like 'town halls'.
- Create [podcasts and audio](#) like the Future of Farming programme in Defra.

Don't expect everyone to engage with a 30-page pdf. You'll need to find [ways to reach out](#) to people where they are.

Done right, your strategy can inspire action and create alignment – but only if it is communicated well across the trust. Portsmouth Hospitals NHS Trust has [distilled their digital strategy into a set of design principles](#). Tools like this can help build a shared understanding of the strategy, making sure that local decisions are aligned to wider goals.

### FURTHER READING

You can spend a lot of time coming up with tactics and strategies for your communication, but the most valuable tool you can use is also the simplest: clarity. Here are some thoughts on [communicating with clarity](#). This [guide to agile comms](#) can also help support your teams in communicating what they are up to to stakeholders.

## Talk about what you've already done

When making the case for digital transformation, it is better to start with what's already been delivered rather than promises of what's to come.

- Show the actual products, not just words and diagrams. How does it work from a patient or clinician perspective?
- **Demonstrate the impact.** What metrics have changed?
- Tell real stories from patients and clinicians, **in their own words.**
- If you can, talk about failures (and the learnings from them) as well as successes.

All this will help build credibility and win the support you need for your digital strategy.

## Follow up

Digital strategy is not something you *have*, it's what you *do*. It is also about having bold goals but starting small and iterating as you learn about delivery. Trusts should approach digital strategy as an ongoing process, not a document to be produced every few years.

Once you've set your strategy, it is good practice to establish a regular delivery rhythm. For example:

- **Weekly or biweekly show and tells:** where staff and board leaders can **see demos, celebrate successes and ask questions.**
- **Monthly progress reviews:** to monitor progress on KPIs, identify and unblock issues. Ensure lessons learnt are incorporated going forwards.
- **Quarterly planning and re-prioritisation:** to make sure **you're still working on the most valuable things.**
- **Regular strategy reviews:** to ensure your strategy still reflects what you're doing.

If you set up these forums in a way that works for your trust they can help maintain momentum and deliver on your trust's digital strategy. They can also be **an effective form of governance**, giving the board confidence without slowing down delivery.



***Data gathering should be a constant and doing small incremental developments and showing your users is a great way to understand what patients, staff and partners think about what you've developed and what they like and don't like. By doing this in small increments it allows you to deliver faster, better and very often cheaper.***

Lynne Mellor, Non-executive Director,  
York and Scarborough Teaching Hospitals NHS Foundation Trust

FURTHER READING

- [How to create the conditions for success](#) by Jamie Arnold
- [Good governance for digital delivery](#)

## Bring people with you

Building a digital strategy is an opportunity to engage beyond the IT department and build strong relationships **between IT, clinical and operations teams**.

Warrington and Halton Teaching Hospitals NHS Foundation Trust call this '**inclusive workforce planning**', where staff who use digital services will be expected to own elements of development. The strategy will only succeed as a whole trust initiative.



***As we develop our digital strategy, we are 'crowdsourcing' our staff, patients and service users to find out their needs, challenges and ideas. We're calling this a campaign because this is an ongoing conversation we want to have that will set the agenda for our future.***

Tim Rycroft, Chief Information Officer, Bradford District Care NHS Foundation Trust

**Clinical engagement** will be central to this work. At **Greater Manchester Mental Health NHS Foundation Trust**, clinical and service engagement has been placed at the heart of their digital strategy. The trust's strategy has made it a key requirement that all digital projects will need sign off by a senior clinician prior to implementation.



*I made sure I was involved in the development of our digital strategy from the very beginning because nursing is by far the largest workforce within the trust. We wanted everyone to own the strategy and so we needed to ensure the clinical community was heard while at the same time showing them the future way of working.*

Gill Green, Director of Nursing and Governance,  
Greater Manchester Mental Health NHS Foundation Trust

Execution of your strategy will require you to have the right capabilities within your organisation. This means **building and enabling digital teams** to deliver digital transformation. But the process of strategy development itself will also support changes: from getting closer to what your users experience to mapping out your existing services. As board leaders familiarise themselves and get increasingly comfortable with these processes, they will find it easier to support their organisations and the wider system to deliver digital transformation.

## Suggested citation

NHS Providers (March 2021),  
*Building a digital strategy.*

## Interactive version

This report is also available in a digital format via:  
[www.nhsproviders.org/building-a-digital-strategy](http://www.nhsproviders.org/building-a-digital-strategy)

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