FOR HEALTHCARE LEADERS

HSJ

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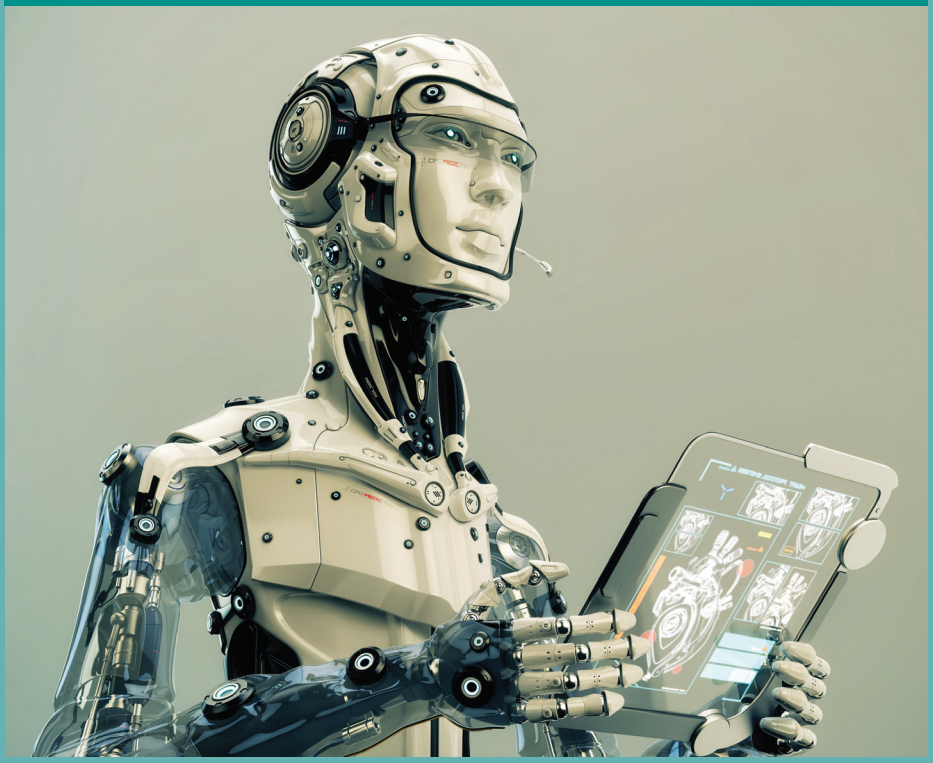
TECHNOLOGY AND INFORMATICS

A GUIDE FOR CHIEF EXECUTIVES



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FOREWORD
IAN DALTON

Technology change starts at the top

Having been an NHS chief executive, I have a huge amount of respect for those doing the same job today. They face many challenges but also many opportunities. I see information, communications and technology as being one of those opportunities. An opportunity to transform the NHS. To deliver higher quality care at lower cost.

It's all too easy to let someone else on the board – the chief information officer, chief clinical information officer or IT director – worry about technology while the chief executive focuses on how they make the services they deliver more efficient without compromising patient experience, among so many other things.

It's all too easy to let someone else on the board – the chief information officer or IT director – worry about technology

Yet those worries can be alleviated in part by the use of technology.

This final guide in the BT/*HSJ* technology series explores the role of chief executives in using IT to more effectively drive the transformation of an organisation – and improve the lives of patients.

What is highlighted is that a chief executive plays a critical part in driving the success of a technology programme. As relationships are formed, not only within an organisation with clinicians, finance and IT teams, but also with peers and suppliers, the chances of success are even higher. The organisations that transform and thrive have learnt the lessons from others and are building on their experiences.

I believe the success or failure of the NHS to offer the quality of care it rightly wants to provide with the resources that it has will depend on its ability to adopt technology. An IT enabled organisation is one that has the foundations in place to transform, to grow and to deliver more efficiently a better experience for staff, patients and carers.

Through sharing the knowledge and expertise of professionals from across the public and private sectors in these guides, BT is ready to help you be bold and innovative in your thinking as you create a new world of care. ●

Ian Dalton is president of BT Global Health.

INTRODUCTION

CLAIRE READ

Don't be intimidated: IT is just too important

The most pressing issue on the agendas of NHS chief executives in 2014 is clear: the continuing need to deliver excellent care at reduced cost. That issue leads naturally to another, however, and it is one that is present on the agendas of chief executives across all sectors – the use of technology and informatics.

What can sometimes get lost in the rhetoric about the need to deliver a paperless NHS by 2018 is the reason behind it. The simple fact is that informatics and technology are likely to offer the potential to meet that number one target on chief executives' agendas: better care at lower cost.

That said, it can be difficult for the leaders of healthcare organisations to know quite how best to engage with this agenda. The technicalities of the IT drive can be intimidating, as can its fast moving nature. The need to engage and understand the requirements of diverse groups – clinicians, IT staff, fellow managers and technology suppliers – can be challenging too.

The need to understand and engage diverse groups can be challenging

This third *HSJ* technology guide, published in association with BT and timed to coincide with the 2014 NHS Confederation conference, is aimed specifically at chief executives. It seeks to answer the question of what they need to be thinking about when it comes to informatics and IT. We have spoken to a range of individuals – chief executives, technology suppliers and IT experts. Our aim, however, is not only to provide a guide to the potential of technology and its increasing importance. It is also to provide practical suggestions about how chief executives can engage with this agenda more fully, and to signpost useful further information. We hope you find it helpful and inspiring. ●

LEADERSHIP

Ten reasons to think about IT and informatics

1 Smart use of technology could increase the satisfaction of your staff

"Many frontline healthcare professionals are frustrated by the care processes in their current work," points out Paul Rice, head of technology strategy at NHS England. "No one likes having to transcribe the same pieces of information multiple times into multiple paper records."

Electronic records aren't a technology project, this is a whole hospital project

2 Information is the basis of all decisions

"What basis do you make any decision on?" asks Colin Sweeney, director of ICT at King's College Hospital Foundation Trust. "It's information. And you want that information to be accessible as you want it, and where you want it. That's why you need reliable IT structures; you need wireless networks, you need devices that you can use to access information quickly, and information from various sources. How do you know what's happening in your hospital if you don't have that information available to you?"

3 It is the means to change your organisation

"Finance directors tend to want to cut information technology because it helps them save money," suggests Justin Whatling, senior director strategic consulting, population health at healthcare IT firm Cerner. "It's seen as another utility it's possible to cut. But we should be investing in it, because it's the means to change healthcare."

4 Technology will impact every single member of your organisation

"I'm in the process of procuring an electronic health record (EHR) solution for the whole hospital," says Paul Mears, chief executive at Yeovil District Hospital Foundation Trust. "I constantly have to remind people in my organisation that this isn't a technology project, this is a whole hospital transformation project which happens to have some technology at its centre. It's going to impact every single person in the hospital."

5 It isn't just the IT director's job

"In my organisation, the senior responsible officer for our EHR is my deputy chief executive who was, up until recently, the medical director," says Paul Mears. "It's really important it's not just seen as the IT director's job, because it isn't. They bring the

technology to the table but how we use it and how we get the benefits from it are about how we change the way the whole hospital operates."

6 It's about being more patient-centric... and so much more

"We need to be much more patient-centric than we are, and I think information technology is a way of making sure we have a holistic picture of the patient," argues Tim Smart, chief executive at King's College Hospital Foundation Trust. "I think that information technology is a way of driving up productivity and efficiency. I think the world at large is becoming much more IT-literate – the innovation that's possible through smartphones and tablets and so on. And then there's the huge opportunity there is through big data."

7 Head in the sand is not an option

"This is not an agenda that people can pull a blanket over their heads and assume it's going to go away," says Paul Rice at NHS England. "It simply isn't."

IT is a way of making sure we have a holistic picture of the patient

8 Patients are going to be thinking about your use of IT and, if your organisation is a provider organisation, so are your commissioners

"I think increasingly we would expect their commissioners to challenge trusts on why they appear to be less well placed on informatics than other organisations; we would increasingly expect patients and the public to challenge them too," argues Paul Rice.

9 It's key to delivering integrated care

"There is pressure on all of us to think about different ways of delivering services and more innovative ways of joining up different agencies," points out Louise Shepherd, chief executive at Alder Hey Children's Foundation Trust. "In the current climate, there is a real imperative to join up agencies and enable them to talk to one another. And you can't do that without the IT that supports it."

10 You have something important to bring to this area

"I think chief executives understand clinical business redesign – we've had a decade or more of the NHS [adopting] lean methodologies and improvement models," says Paul Rice. "Now there's a holy alliance to be forged between what chief executives understand about managing and leading change and what chief executives can understand about the capability of technology to assist them in that." ●

Six things you need to know about IT and informatics

You know technology and informatics are important to your organisation. But, as a chief executive, what do you need to be thinking about when it comes to this agenda? We asked a range of people from various backgrounds to answer that question. Over the next nine pages we look at their answers, which address six key things you need to know or consider.

1. THE IMPORTANCE OF NETWORKS

‘One organisation cannot do everything’

TOP TIP

Connect with academics and suppliers as well as other care providers

NHS organisations are frequently accused of reinventing the wheel – one trust implements a technological solution which has already been rolled out elsewhere, for instance, but there is a failure to share knowledge and experiences. Or an academic institution has knowledge about a particular aspect of informatics, but there is no conversation between it and the health organisation.

It is a situation which Krishnarajah Nirantharakumar argues is unnecessary. Dr Nirantharakumar, a senior clinical lecturer at the University of Birmingham and academic public health consultant in health informatics with Public Health England, argues that chief executives can and should learn from what has gone before.

“I would say chief executives need to make sure that they are not just meeting the government target to be paperless by 2018 but asking how they go about doing that so they really make some savings and improve care for the patient. And I think the only way to do that is to ensure you speak to people who have done that before.”

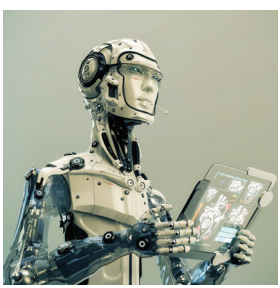
It is the rationale behind the West Midlands Health Informatics Network, which Dr Nirantharakumar recently founded with colleagues. “It brings together those who provide the care but also those who have in depth knowledge about doing this – the academics, but also the suppliers.

We are now linking up with Birmingham University economists

“I think networks will be the only way in a climate where we don’t have much money. One organisation cannot do everything, so we need to share,” he says.

It seems his local colleagues agree: within two weeks of creating the network, 150 people had registered. And he sees other potential to build connections with academics. Before he joined the University of Birmingham, Dr Nirantharakumar worked at the Institute of Digital Healthcare at the University of Warwick.

“The institute brought together engineers, clinicians and computer scientists to work together,” he explains. “We are now setting up one within Birmingham University – linking up the economics department, people who know how to deal with big data and how to connect it to performance outcomes. I feel that’s an area we have to really carefully look at.” ●



2. AVOID FLAVOUR OF THE MONTH

If it's Tuesday, it must be telehealth

TOP TIP

Think about what will give most benefit to the most patients

It can often seem as though the informatics and information technology agenda veers from one place to another: one moment all the attention is on e-prescribing, the next there is intense focus on the importance of electronic order communications, which quickly becomes superseded by renewed attention on the potential benefits of telehealth.

According to Colin Sweeney, this sort of piecemeal approach is one chief executives would be well advised to steer clear of. "Our view has always been that we try to give the most benefit we can to the most patients," says the director of ICT at King's College Hospital Foundation Trust, which is one of only three trusts to have all the systems assessed by the new national Clinical Digital Maturity Index in place.

Chief executives and their board level colleagues can lend perspective

"There are lots of IT projects in the NHS which focus on specific groups of patients: older people, for instance, or those with diabetes," he continues. "When I first came to King's, there were something like 50 paper libraries where people kept notes and in some respects lots of healthcare organisations do something similar with IT – we'll put in a system for patients with diabetes, we'll put in a system which will help older people."

It is an approach which, he argues, reduces the ability for joined up and logical ways of working.

"E-prescribing is a very valuable thing to do," he suggests. "But first of all you need to concentrate on pulling in pathology results,

WHAT I WOULD SAY TO CHIEF EXECUTIVES ABOUT IT AND INFORMATICS

Justin Whatling, senior director strategic consulting, population health at Cerner and chair of BCS Health at BCS, the chartered institute for IT

"The one thing I'd want to do is help the chief executive to envisage the art of the possible with technology. Because I think many chief executives just don't know what technology can offer them. I'm finding this with patient record systems: if the project is led by the IT department and the board isn't engaged, it just doesn't work. So my top tip would be for chief executives to work with partners to go and envisage and understand the art of the possible of what technology can do for their business. This is what every other sector does. And everything flows from there."

requesting lab tests, and integrate that whole process. If you are going to start thinking that a patient's potassium levels are very high and therefore they ought to have this particular drug, then you need a link between those two – you've got that pathology result, now you need to do some prescribing.

"If you are ultimately going to do clever things around decision support then you need to have systems talking to one another, or at the very least have information in the same system."

Mr Sweeney says this is an important area in which chief executives and their board level colleagues can lend perspective. It is unlikely they will fall into the common trap of opting for a system which works well for one specific group of staff but less well for another. He gives the example of the introduction of e-prescribing at King's College Hospital Foundation Trust.

"We had a conversation many years ago, back when we were thinking of doing e-prescribing, about whether we should use the system our pharmacy colleagues were recommending – which was their own pharmacy system," he remembers.

"And our view was, well, we use a lot of different order sets: we will have people who want to make a lab request, a radiology request, and then the drugs that go with those requests. How do you do that if you've got multiple separate systems?" ●

3. CONSIDER APPOINTING A CCIO

‘It was one of the first things I did – and it works’

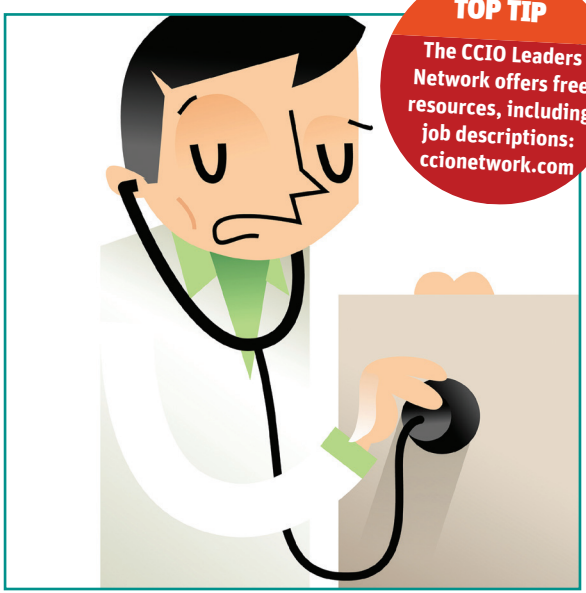
TOP TIP

Build a team that will promote clinical engagement

Ask Tim Smart to name one of the most important appointments he has made in the five and a half years he has been chief executive of King’s College Hospital Foundation Trust and he does not hesitate.

“The appointment of Jack Barker as clinical director for IT,” he says. “It was one of the first things I did when I got here – and I think it works very well. Colin Sweeney [director of ICT] was doing a great job, but I’m really passionate about clinical leadership and I thought we need to appoint a clinical IT lead.”

Such appointments are becoming increasingly common in NHS organisations. This is unsurprising given clinical engagement is seen as a make or break factor when it comes to the success of healthcare IT projects. Individuals such as Dr Barker, who combines his role as clinical director for IT with his position as a consultant respiratory physician, work across their organisations. The idea is that they are best placed to support clinical engagement in technology projects, and also ensure that systems fit clinicians’ needs.



TOP TIP

The CCIO Leaders Network offers free resources, including job descriptions: ccionetwork.com

Mr Smart is clear that IT and informatics is firmly on his agenda: “I don’t think there’s a chief executive in any business anywhere who could legitimately say that it’s not a priority” – but also that his involvement should be limited to some extent.

“I don’t think you should get directly involved in IT and informatics. I think neurosurgery is really important at King’s College Hospital, but I don’t go and do brain surgery,” points out Mr Smart. “This is all about making sure you have a good team.” ●

4. FORM PARTNERSHIPS WITH SUPPLIERS

Does your supplier understand you?

TOP TIP

Thinking of a new IT solution? Ask if you can visit a supplier site that has it already

Paul Mears brings an interesting perspective to the importance of partnerships with IT suppliers "because I've been on the other side of the fence", he explains. "My last job before joining the NHS was working as a business consultant for an IT company," says the chief executive of Yeovil District Hospital Foundation Trust.

He says that has given him an insight into the importance of forming strong connections with your suppliers. "If you are going to make a significant amount of capital investment in an IT system, it's not just a transactional relationship you need to have with your supplier; it's a partnership relationship," he suggests. "Because the provider needs to understand your business, and your challenges, and you need to equally understand their organisation and their issues so you can find common ground.

"I think as a chief executive you have to have a very open and transparent relationship with suppliers," he continues. "One that is founded on saying how can you help improve what we do in our organisation."

It is a point echoed by Roger Killen, managing director of The Learning Clinic, whose VitalPAC system has recently been launched at the trust. He is argues that it is very important for chief executives to take a keen interest in information technology. But he emphasises that this does not need to be in every last aspect of a product specification.

The detail of the technology is not what they should be looking at

"The detail of the technology is not what they should be looking at," he argues. "Technology is an enabler. So they should be looking at the details of the benefits and the transformations that the technology enables. That's where they need a clarity of focus; that's where they should be scrutinising their project teams and indeed their suppliers.

"My experience as a supplier is that IT teams think much more about whether a product works to spec, not whether it delivers a better hospital.

"What the chief executive should be asking is: does this deliver me a better hospital, a safer hospital, a more efficient hospital?" ●

5. IT IS THE FUTURE

What does the digital hospital look like?

When Louise Shepherd and her colleagues were thinking about plans for a new hospital, one requirement was beyond doubt. "We were thinking about what a 21st century hospital needs to look like," explains the chief executive of Alder Hey Children's Foundation Trust. "What does healthcare in the 21st century for children and young people need to be about? And we said, well, we absolutely need to make sure that the new hospital... is truly digitally enabled."

My goodness, kids don't half think about the future differently

The result is that the trust's new hospital, currently being constructed and due to open next year, "has a digital infrastructure built into it – basically, the building and the IT talk. So the building interacts with the IT within it; it's all part of a piece. We wanted to digitally enable the building and wanted to build that infrastructure right from the word go."

The idea is to have digital capabilities supporting a child's journey through hospital: allowing them, for instance, to electronically specify meal preferences and what sort of games and entertainment they would like best during their hospital stay.

Ms Shepherd says that the clinicians in her trust have no shortage of exciting ideas, and neither do their young patients. That said, there was an acknowledgment that external support would be needed to realise those concepts.

"If we want to stay ahead of the curve then we [need to] ensure we are communicating effectively with children and young people and that our clinical professionals are able to utilise technology in the most up to date way they can, in the most effective way possible.

"But we also recognised that we don't know what we don't know. Within the NHS, within Alder Hey, we don't always know what we don't know. We're not experts necessarily in this field and we also need in the world of IT and communications to be extremely nimble.

"So we said we haven't got all the answers, and we probably need to work alongside a partner who we can basically both invest in developing new technologies and new ideas on an ongoing basis. We can put some basic infrastructure in now that we can all agree on, but fundamentally what we need is a long term partnership arrangement with a major player, a major global player really, who can support the development of new ideas and enable them to come to fruition."

The decision was therefore taken to go out to market to find a partner. But the aim was not simply to find a supplier. Instead, the desire was to find an organisation which

TOP TIP

Use partners to bring in new ideas as well as act as suppliers

could help develop a concept of what a digitally enabled hospital looks like.

The result is that the trust has now partnered with BT. Explains Ms Shepherd: "We effectively have guys from BT and guys from Alder Hey working together to think about things in a really exploratory way.

"We recently had our first three day innovation hub event at Everton Football Club and we had six teams working on particular themes. Out of that comes a 'winner' which gets developed. BT people put their people alongside our people to see if we can actually make something of this."

WHAT I WOULD SAY TO CHIEF EXECUTIVES ABOUT IT AND INFORMATICS

Phil Koczan, chief clinical information officer, UCL Partners

"Working from the UCL Partners' perspective, there's a lot of interest and engagement at senior levels about informatics and what it can do. But I also think there's a tendency to think it's a quick fix and it's a simple solution. That's the challenge: getting chief executive engagement but also making sure we've got alignment with the IT professionals and clinical leaders within an organisation. That's where informatics becomes very powerful. It needs team work within the organisation to make it happen."

It is, she says, a mutually beneficial partnership. "Of course for BT it's an opportunity to think about whether these ideas could then be a business proposition – not just in health but perhaps in other environments as well. And what we at Alder Hey have found is that has enabled us to think in a completely different way, because it takes out of our traditional box."

Patients and families were also involved in the hub, and will be as it moves forward. Ms Shepherd emphases how working with paediatric patients gives a very different view of where hospital care needs to be going.

"Getting kids involved in thinking about the future – my goodness me, don't they half think about it differently to the way old sticks like me do," she says with a laugh. "Completely differently. They are in a different world completely. And our young consultants, our young nurses, our switched on IT people are really up for this; the children are absolutely pushing for it. That's enabling us to really think differently and to create new ideas, and what we think are going to be quite exciting things in the delivery of healthcare going forward.

"For us, IT is absolutely central to our whole transformation programme," she concludes. "I can't emphasise that enough. When we started to think about the new hospital, about models of care for children, you can't do that and not have IT in the middle of it." ●

6. UNDERSTAND WHERE YOU ARE

How to measure your digital maturity

TOP TIP

The CDMI is available free to all NHS trusts: www.england.nhs.uk/ourwork/tsd/sst/cdmi

You are familiar with how your trust is performing on mortality. Information on any waiting time breaches quickly reaches your desk. Serious complaints too. But do you have a concept of how well your organisation is doing on the informatics agenda?

For many chief executives, the honest answer will be no and that is not an unreasonable response. It has been difficult to build an understanding of performance on IT and informatics: data has been limited, particularly that which might offer a comparative picture.

But that excuse has become less valid – for acute chief executives, at least. In November, NHS England launched a clinical digital maturity index (CDMI). This benchmarking tool was developed with EHI Intelligence, to make it easier for acutes to understand their position on informatics.

"It's a first step to try and develop a much more sophisticated approach – to [assess] not just whether people have technology, [but also] whether they're using it and whether they're optimising it," explains Paul Rice, the head of technology strategy at NHS England, who says in future there will also be specific indexes for mental health and primary care.

"Effectively, the idea is that it would be helpful to understand what capability you require to deliver digitally-enabled services. But beyond that what we want to do is increasingly incorporate sensitivity to not just the fact that people have the capability but that they're using that capability in an enterprise-wide fashion. Because we're all very familiar with the fact that areas of organisations have championed the use of informatics, IT, tech, and that's not always pervaded across the whole business."

He explains that the final step will be understanding how big an impact technological and informatics solution are having on clinical outcomes, quality of care, safety, and patient self management.

"Fundamentally, the case is increasingly made that you can't provide optimal care without some of this capability," points out Mr Rice. "We're not just talking about this for the march of the machines; we're talking about this because this is what good quality, safe, participative, effective, efficient, lower cost care looks like in the future."

As a result, he argues that it is crucial chief executives engage. "Relegating this to the deputy director of IT who reports to the deputy director of finance who reports to the director of finance who has a place on the board is just not the right place... for this.

"Yes, there is... expertise that is required around the pins and the wires," he acknowledges. "But in effect what we're saying is that the strategic level agenda – your clinical business strategy going forward – should be predicated on a higher level of digitisation, a higher level of access to and use of information technology, a higher level of understanding and moving your business forward in light of the insights that are available to you in terms of the data."

The CDMI, it seems, is a crucial tool to consider when exploring how close your own trust is to this target. ●

WHAT I WOULD SAY TO CHIEF EXECUTIVES ABOUT IT AND INFORMATICS

Paul Rice, head of technology strategy at NHS England

"I don't think we should beat up chief executives about their current level of engagement with this agenda. Their experience of this agenda is that some of the language and the very technical aspects of it aren't as accessible as they should be. However, there is also this notion that it belongs to the geeks. It doesn't. It's simply about functionality and capability; it's about what you can do in terms of organising and delivering care in a different manner."

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