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Public sector tech trends:

2022

Inspiring a collective approach
for more innovative public services

Inspired by

CIVICANorthStar*

Societal trends and technological advances are shifting perceptions about how we live and work.

Powerful and exciting new technologies are emerging continuously, offering more, and better, opportunities to enhance outcomes for citizens; better healthcare, easier access to frontline services, reduced administrative costs and greater insight. Our public sector leaders agree, with **93% confirming that using tech to improve experiences is the key focus for the future**.

We each have a role to play in determining the path that these technologies will take. The need to stay ahead and remain innovative presents a challenge for us all. We hope our predictions help you navigate what lies ahead in 2022 and beyond.

2	1	3
Cyber security	AI & machine learning	Smart devices
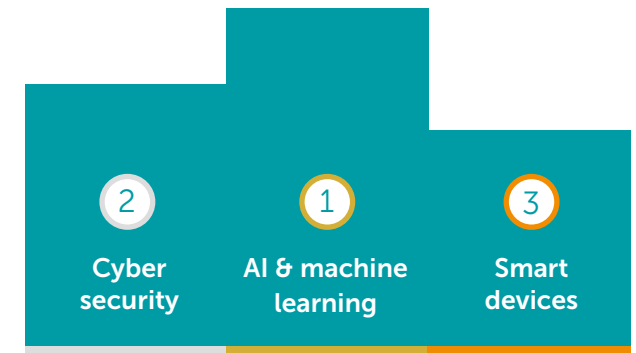
Top three technologies public sector leaders think will make a difference in 2022. Civica

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{On trend?

Last year, we published our seven trends for 2021. Looking back, let's see if we were right.

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So were we right or wrong?

01. Tech-celerating citizen's expectations

The demand for fast, efficient access to digital public services shows no sign of slowing. If anything, citizens are now demanding more of a say in how services should be delivered.

60%

of citizens more confident using digital public services than before COVID-19.

PUBLIC & BT

02. Blended experience between physical and virtual worlds

Cycles of COVID restrictions have meant organisations have continued to find ways for their services to be delivered with employees working remotely. It's clear that the hybrid life is here to stay.

83%

of employees confirmed they prefer a hybrid working model.

Accenture

03. Contactless everything

Some good progress was achieved, but with concerns about privacy and trust we didn't observe a strong shift to contactless interactions within public services.

1.3bn

contactless transactions in the UK during October (up 34% on year).

UK Finance

04. The datafication of me, the internet of us

The 'internet of us' exists, but whether we're yet using it to add value remains uncertain. Strengthening citizen trust remains a significant barrier to fully realise the benefits this capability can deliver.

12bn

connected devices in the world (up 8% on year).

IOT Analytics

■ Not right   ■ Somewhat right   ■ Nearly right   ■ Right

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05. AI + Human Collective Intelligence = ?

Pooling society's collective intelligence helped in the fight against COVID-19. However, more confidence is needed to help ensure we can efficiently deal with the challenges of the future.

86%

of public service leaders confirmed machine learning can benefit the sector.
Civica

06. The growing need for safety and security

The need to remain safe, both as a citizen and as service provider, remained an important focus area. We would have expected to see more impact, but there is still some work to be done.

5.1bn

breached records were identified in 2021 (up 11% on year).
IT Governance

07. Revival of the local community

At the start of the year, 'green recoveries' in local communities gained traction. However, what could have started a move to locally functioning economies hasn't yet been fully realised.

£4.8bn

levelling up fund announced to support high street regeneration.
UK Government

Our overall score

■ Not right ■ Somewhat right ■ Nearly right ■ Right

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Our innovation highlights

As we entered 2021, we eagerly waited for the moment when the pandemic threat would end. Instead, we have endured a further 12 months of varying restrictions, freedoms and threats. Yet, our spirit of innovation soared.
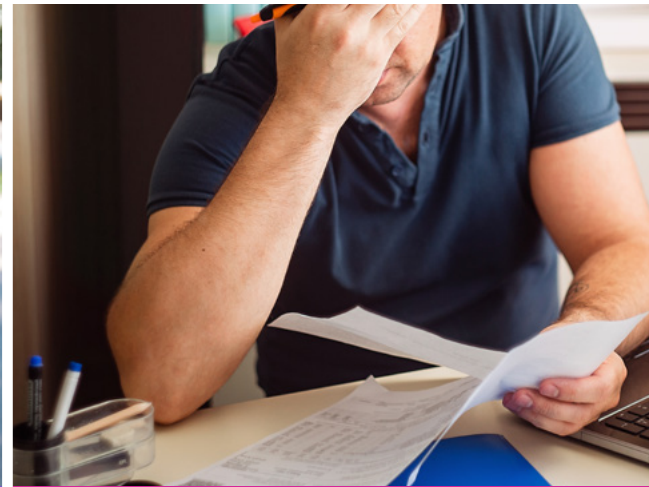
Growing digital demand

2021 saw an explosion of users using the new NHS App, with over 7 million patients engaging with their care providers every week.

Engaging local spaces

Hull City Council is using Augmented Reality (AR) to help its citizens engage better and make local public spaces 'come alive'.

Tackling fuel poverty

The Social Connect project is sharing data to identify and support households struggling with rising household fuel bills, now and in the future.

Enriching local communities

Students at Bromley Primary School in New Zealand created their own app to share a deeper connection with the Samoan culture.

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{Our 2022 predictions

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Our seven trends for the year ahead

Key enabling technologies

01 Personalisation as a service
Citizens are now expecting the same level of personalisation as Netflix. **Learn more >**

02 AI + Human Collective Intelligence = ?
Making services more resilient and putting valuable insights in our hands. **Learn more >**

03 Embracing the hybrid life
Inclusive, hybrid physical/digital offerings will become the new norm. **Learn more >**

04 A smarter society
An acceleration to connect more devices and create a complete 'internet of us'. **Learn more >**

05 Trust as the new currency
We are now at a tipping point of trust to help us unlock the power of data. **Learn more >**

06 Supercharged digital democracy
The inclusion of the citizen voice will be key for future public service design. **Learn more >**

07 Rising social consciousness
Practical action is demanded on our biggest environmental and social issues. **Learn more >**

Identity management

Blockchain

Data analytics & machine learning

Chatbots & conversational AI

Virtual & augmented reality
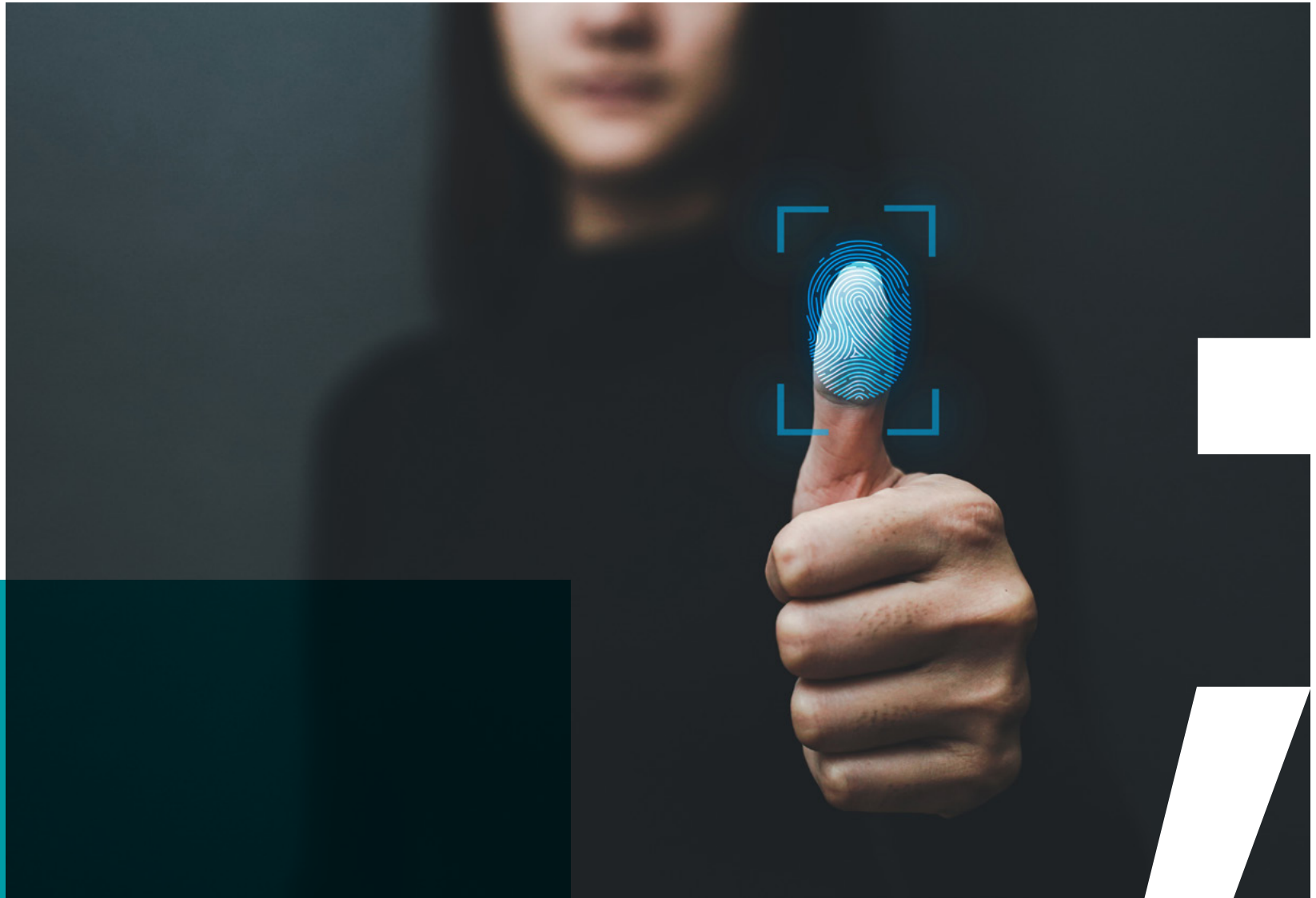
Connected devices

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Personalisation as a service

Key technologies

Identity management

Blockchain

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During the past 12 months, people became more comfortable using technology and interacting with services online.

In the consumer space, we're surrounded with algorithms that provide personalised recommendations about what we should watch, listen to or buy. Citizens are starting to expect this same level of personalisation from all services, including those delivered by the public sector.

This growing trend for personalisation will offer opportunities to improve the citizen experience, and even provide bespoke medicines and care services. This opens big questions for already stretched public services particularly on how to deliver this in a way that is safe, secure and transparent.

The debate around identity management will become critical in 2022. Systems must be able to recognise and verify who you are, while also keeping your information safe. With biometrics, like face or fingerprint recognition now part of daily use on mobile devices, we have an opportunity to extend these into public services.

80%

of public services leaders said that personalised services could benefit their sector. Civica

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AI + Human Collective Intelligence = ?

Key technologies

Data analytics &
machine learning

Chatbots &
conversational AI

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From the fuel delivery crisis, to care recruitment shortages, we've all witnessed how major events impact our economy.

The stark reality is that with the increasing demand for public services, there are not enough people to meet that demand.

One solution is to embrace the collective intelligence of humans and machines. AI will continue to offer opportunities to enhance human ability to perform tasks, learn, adapt and make more informed decisions.

Augmenting humans with machines will be vital to respond to our complex world. It can help us spot opportunities for earlier intervention to prevent a disaster, find variations in spend profiles to optimise costs, and most importantly, free up frontline workers to focus on human contact.

This is not about robots replacing our jobs, but about 'augmentation': using the processing power of intelligent algorithms to make services more resilient and put valuable insights into our hands.

Waiting lists for elective operations are now longer than at any point since at least 2007. The Health Foundation

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Embracing
the hybrid life

Key technologies

Chatbots &
conversational AI

Virtual &
augmented reality

Connected
devices

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Employees want the best of both worlds

70% want flexible working to continue

65% want more in-person contact with teams

Source: Microsoft

The blended home and office environment has become part of our daily life, and we believe it's here to stay. There's no going back to the old ways, and we must embrace the digital world to enable this new way of life.

Whilst this new living pattern has brought welcome opportunity for many, it presents a continued set of challenges for the delivery of public services across the 'digital divide'. From virtual team meetings, to managing remote inspection services, and providing medical consultations via mobile devices, the need to find long term (rather than ad-hoc) solutions is essential.

The next iteration of virtual interactions is already arriving with tech companies like Meta and Microsoft investing heavily into the metaverse; 3D immersive and collaborative experiences accessed via mobile devices or VR headsets.

This year will see demand for inclusive, hybrid physical/ digital offerings that ensure high quality services for all, regardless of how they choose to deliver or access them.

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A smarter society

Key technologies

Connected devices

Data analytics & machine learning

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There are now more smart devices in the world (12.3 billion) than people. IOT Analytics

The rise in remote working and sustained interest in personal health monitoring devices due to COVID-19 have been driving a smart device explosion. From ear-worn devices and smartwatches, to smart skin patches, we are now using wearables for everything from virtual work meetings, fitness tracking, and even remote administration of medication.

The near future will deliver increasingly discrete devices that are likely to be accepted by older adults as part of assisted living systems.

The spaces around us are also becoming increasingly more sensor-driven, generating data about everything from energy usage to air quality. Demand will increase for in-home, urban and personal wearable devices to communicate with each other and create complete 'internet of us', providing increased insight and control of our environments.

It's an area that can bring real opportunities, with 90% of public sector leaders confirming these devices can benefit their sector. We see the continued interest to connect more smarter devices and help us build a smarter society.

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Trust as the new currency

Key technologies

Blockchain

Data analytics & machine learning

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We're a tech-savvy nation, increasingly comfortable sharing our data in return for a service. But we are now at a tipping point of trust. Why is it that many more of us are happier to share our data with Deliveroo than with our doctor or our council?

Recent months have shown that the general public is starting to understand the importance of data sharing. Ultimately, trust comes down to clarity on the value proposition.

Having robust standards in place will help ensure both transparency and confidence address the wider question of how our data is used, by whom and for what value.

As public services around the world face increased public scrutiny over their effectiveness and trustworthiness, we will see new technologies such as Non-Fungible Tokens (NFTs), cryptocurrencies and blockchain being investigated for managing public funds and putting transactions into public view; making them as transparent as our fast-food deliveries. Trust is becoming a currency.

Who do you trust?

The Edelman Barometer 2021 reports businesses are more trusted than government in 18 of 27 countries.

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Supercharged digital democracy

Key technologies

Chatbots & conversational AI

Connected devices

Data analytics & machine learning

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When times are tough, people want to have a say on public policies. The pandemic has spotlighted important issues of homelessness and the care of our older generation. People are investing more time in their local communities due to remote working, and consequently taking more interest in local decisions like urban planning.

The rising demand to include the citizen voice will be an important trend when designing future public services. The recent youth voice on climate has shown how much momentum can be gained by those who believe they can drive change.

With formal consultation routes lacking the levels of engagement seen on social media, social channels will continue to be the dominant space for observation and capture of citizen sentiment. Decreasing voter turnout, particularly among younger voters, signals a need to embrace technologies that can engage citizens with insights about their communities. And it will be important to make sure all voices are heard, not just the loudest.

56%

of citizens in 17 of the world's advanced economies say their political system needs to be completely reformed.

Pew Research Centre

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Rising social consciousness

Key technologies

Blockchain

Connected devices

Data analytics & machine learning

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Social impact has become mainstream. From diversity and inclusion, to sustainability and global poverty, citizens are becoming more socially conscious increasing pressure on organisations to provide evidence of how they are operating.

While there's not the same choice as with retail brands, the demand for public services to show practical action on some of the biggest environmental and social issues will impact their desirability as an employer, as well as influencing public support and engagement.

Data and AI will play a key role in supporting transparent evidence-based decision making on social impact as well as helping track and share its progress. We will also see more innovation around social impact investing, development of local economic systems and carbon credit trading.

81% of citizens confirmed ethical sourcing influenced their purchasing decisions. Valassis

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{ # Looking forward

This year we will be expanding our successful Perspectives* series to explore new technologies that we believe will support the evolution of our society for the greater good.

Connected devices

Blockchain

Identity management

Sound good?
Then why not join our mailing list and receive future volumes of Perspectives* hot off the press.

SCAN ME

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Civica is the UK's largest headquartered software company focused on the public sector. With over 30 years of proven expertise, we hold an undisputed leadership position in our markets around the world.

In an era of unprecedented change, we are committed to helping our customers achieve their net zero targets.

Through our commitment to turning ideas into action, we help over 2.5 million professionals deliver the public services of the future, every day.

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At Civica, innovation is in our DNA. We take great pride in putting together exceptional teams and a genuine, purpose-driven culture to help everyone be an innovator.

Our innovation lab, Civica NorthStar, is focused on creating enhanced outcomes for public services by applying fresh ideas around data, automation and new technologies.

Working with our customers, we harness new thinking and innovative technologies to create enhanced outcomes for our communities.

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