

Becoming 'Digital Ready'

Innovation. **Knowledge.** Sustainability.

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Foreword from our Chair...

Welcome to our latest **DIZ Annual Progress Report**.

In a year where the digital landscape has, as ever, continued to evolve and innovate at a fast pace, it has been particularly rewarding to see the DIZ continue to be seen as a source of knowledge and expertise, a reliable and trustworthy resource for anticipating what is coming down the line.

We have welcomed many, many new individuals and organisations into our fold as new attendees at our DIZ Advisory Board, new subscribers to our weekly horizon-scanning newsletter and new collaborators on innovative digital initiatives and funding bids.

And the work done to explore these new collaboration opportunities has helped establish an even stronger foundation on which to build future bids and put forward new proposals. We have worked closely with our district and county colleagues and will build on this to explore how digital might, collectively, further support our residents and businesses. We have also joined with our academic colleagues to not only explore how we might exploit the power of our data or work to address the climate change challenge, but also to explore how we might work across our geography to create an innovative 'place-based' response to many of the challenges the region faces.

And throughout, we have continued to look to ensure that 'no-one gets left behind' by digital innovation, actively supporting the digital inclusion efforts and projects being delivered by our local

authority and community and voluntary sector partner organisations.

Our collaborative approach to emerging digital issues continues to resonate and there will certainly be many opportunities in the year ahead to form new working relationships and partnerships and to create new digital initiatives for our place.

Councillor Alan Lion, Epping Forest District Council,
Chair of the DIZ



DIZ: Working towards a sustainable, knowledge-led, inclusive digital future...

An introduction by Mike Warr, DIZ Programme Manager + Acting Director

It is almost a given that, every year, the DIZ finds itself operating at a time of great change. Today we see artificial intelligence emerging as a global innovation enabling everyone access to powerful computing power; we see data increasingly being generated, collected and analysed in order to enhance and redesign vital services; and, we see all of this transformational digital innovation occurring at a time that needs to be framed within the climate change challenge we are all grappling with. Faced with this ever-evolving and fast-moving landscape the DIZ has continued its efforts to ensure this place, its partners, its residents and its businesses are well-placed to get the best out of all that digital innovation has to offer.

The area has always looked to develop excellent levels of digital connectivity and supporting infrastructure across the place. By placing a focus on 'knowledge uplift' and giving our partners the skills, understanding and confidence they require to make the most of the innovation that will rely upon this infrastructure, the DIZ aims to ensure our place is 'becoming digital ready' and is well-placed to secure the dividend of digital innovation for everyone.

We have continued to see, in recent months, welcome announcements of major digital investment in the DIZ from the private sector with plans for advanced data infrastructure that will underpin digital operations, applications and innovations.

Sustainability and the climate change impact of digital innovation and everyday digital operations has led the DIZ to make this a key focus of its efforts. We have

established a Sustainable Digital Special Interest Group and embarked on work to address the carbon footprint of our online presence.

And, alongside our efforts to look ahead and understand what the future holds, we have continued to support efforts across the DIZ to ensure that everyone is able to enjoy the benefits of an increasingly digital-led life right now. Supporting initiatives to address digital exclusion, however it is caused, has remained a key part of what we do.

As always, we are hugely grateful for the continued financial support of our district and county council partners - Broxbourne BC, East Herts DC, Epping Forest DC, Harlow Council, Uttlesford DC, Essex CC and Hertfordshire CC. The partnership has also been helped significantly by organisations contributing their time and expertise to support our ongoing efforts to share knowledge about the digital landscape and prepare our partners for the digital innovations coming down the line, whether that is through our monthly DIZ Advisory Boards or our Smart Place Seminars.

I would personally like to thank John Houston, our former DIZ Director, who left his role this year. John's vision for the DIZ and his efforts to realise the partnership have laid the foundations for our future progress. I would also like to thank former Broxbourne BC councillor and DIZ Vice-Chair David Holliday, who has also now left his role, and whose keen interest and support for the work of the DIZ was invaluable and always very much appreciated.



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The DIZ Advisory Board in 2023/24



10 Advisory Boards

130+

unique online attendees

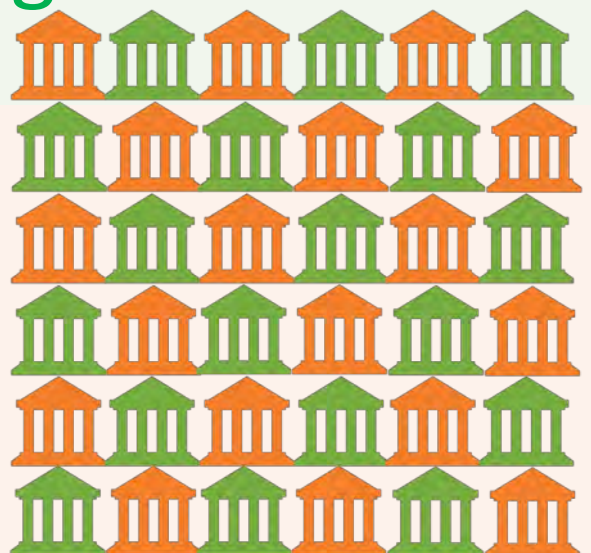
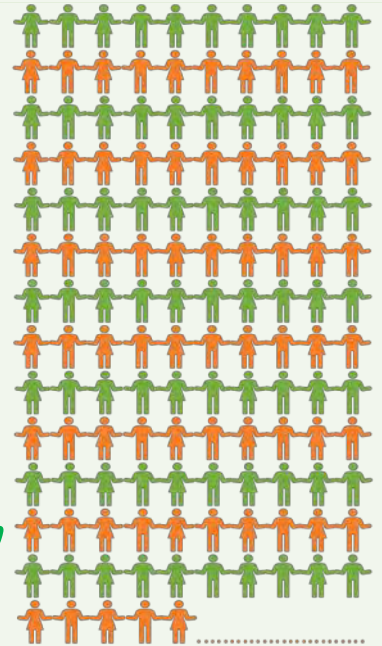
from **36**

organisations



18

Guest
Speakers



Innovation Pillar 1: Knowledge Uplift

Giving our partners and place the confidence to be 'Digital Ready'...

Since the DIZ was formed to explore the digital landscape and the potential benefits it could bring to our place, our organisations, our residents and our businesses, a key challenge has been how to bring our partners and stakeholders along on that journey. How can we build their confidence with, and understanding of, key emerging digital innovations and equip them to exploit and maximise the benefits of the opportunities for their organisation and clients whilst also minimising any risks and negative impacts?

Knowledge uplift has therefore always been a key element of the DIZ work programme and this was reinforced at the strategic priority-setting session we held earlier in the year. Partners value the work we do to highlight these opportunities and innovations and that work has continued apace throughout the last twelve months. There are three key strands to the DIZ knowledge uplift programme:

DIZ Advisory Board Meetings

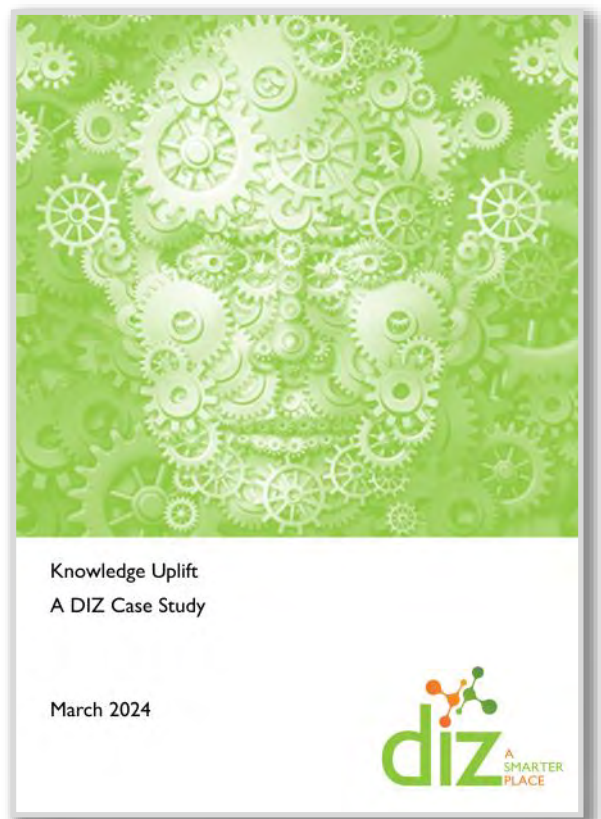
The monthly DIZ Advisory Board meetings were initially an opportunity to engage with our community of willing stakeholders from across the DIZ geography and from sectors other than local government. During the COVID pandemic, this opportunity to share experiences and learning, and to engage and work with each other to understand what more might be done

to support their efforts and initiatives, became critically important.

Beginning in May 2020, a programme of guest speakers at the DIZ Advisory Board was begun, inviting speakers to present on a current or emerging digital issue or initiative and then take questions from our partners.

This has continued in 2023/24 and, in just the last 12 months, we have hosted guest speakers talking on website sustainability, living labs and

...cont





future mobility, digital twins for planning and public engagement, the National Underground Asset Register, the Public Switched Telephone Network (PSTN) switch-off, broadband social tariffs, digital engagement with residents for garden towns, Lego in Libraries, tech for children, applications of artificial intelligence and opportunities for collaboration to deliver digital projects. These are all key topics that resonate with our partners and help to highlight the key issues that they may wish to take back to their own organisations as they consider the implications and opportunities for service delivery and planning.

Total attendance at the Advisory Board sessions over the year exceeded 300, comprised of over 130 unique individuals, representing more than 30 organisations. And with some of the topics covered delivering powerful insights there was growing demand for reruns of the sessions. A total of 12 reruns have been run since April 2023 enabling an additional 60+ attendees to watch the recordings.

DIZ Smart Place Seminars

These sessions, which began in the very first year of the DIZ, have always sought to address topics that are guided by the issues that are important to our partners, issues that they are grappling with in their day-to-day organisational service delivery.

Having previously examined topics such as digital health and social care, digital inclusion, digital skills, 5G and digital sustainability, in 2024 the latest of these seminars, 'How Can Data Transform Our Place?', explored how data has emerged as a highly topical opportunity for organisations of all sizes and sectors and examined how we might better understand and use this data to shape the services we deliver and enhance the important work we all do.

Bringing together the usual mix of local (Herts CC), regional (London Office of Technology and Innovation) and national (Local Government Association) subject matter experts, the seminar brought a blend of inspiration and guidance on

The DIZ Weekly Weblinks in 2023/24

 46

Newsletters

 686

Weblinks



150

Recipients



“Quite a list. I have to say you really do cover everything and I can’t believe anything is happening with relevance that we don’t get told about. If we are in the dark – it’s down to us!!!” (A Weekly Weblinks Subscriber)

how best to approach the better use of the data we collect, together with real-life case studies that brought the data to life and showed how it can be used to tackle challenges as wide-ranging as traffic surveys and preventing recurrent homelessness.

To complement the local authority focus, an academic perspective was brought by Prof. Jennifer Schooling the new Professor of Digital Innovation and Smart Places at Anglia Ruskin University.

Attracting over 80 registrations to watch the seminar both live and on demand, attendees came from within and beyond the DIZ, as far afield as Stoke. The Executive Report and recording of the event can be found on the DIZ website at <https://diz.org.uk/diz-resources/>.

DIZ Weekly Weblinks Newsletter

The DIZ team has always undertaken an horizon-scanning role, keeping a watch for emerging digital issues, innovations, initiatives and opportunities. The DIZ Weekly Weblinks

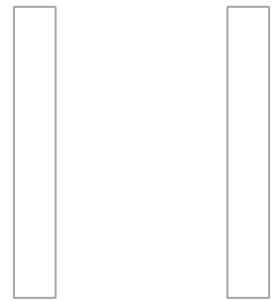
newsletter was introduced as a timely, current and news-driven mechanism to enable our wider partnership of stakeholders to explore digital issues and opportunities as they emerged.

The newsletter has evolved over time and now groups links within key digital categories as well as providing a short summary text along with each link to give a sense of what the article, report or event may be about, prior to following the link.

Links included will often be a blend of national and international news stories, reports and events but also local initiatives and local events that are promoted to maximise the benefit of the newsletter to local partners.

The DIZ team continued to grow the newsletter’s circulation in 2023/24 it and is now distributed to over 160 individuals at 48 organisations. Anyone interested in receiving the newsletter should contact Mike Warr at mwarr@eppingforestdc.gov.uk.





Innovation Pillar 2: Sustainability

Responsibly becoming 'Digital Ready'...

The impact of digital applications and technology on carbon emissions and climate change is a major challenge facing organisations and innovators. If we consider just the data industry alone, it is set to account for more carbon emissions than the automotive, aviation and energy sectors combined.⁽¹⁾ 2.5% - 3.7% of global greenhouse gas emissions are generated from data centres compared with aviation at approximately 2.1% - 2.4%.⁽²⁾

And this is not a problem that just sits with large industry and multi-national organisations. We each have a role to play in addressing the sustainability of the technology we deploy. It is estimated that one person creates 1.7mb of data a second, which equates to 10 full DVDs in a working day⁽³⁾. The data carbon footprint generated by 100 employees over 12 months is equivalent to flying from London Heathrow to New York 2,562 times a year⁽⁴⁾.

In early 2023, the DIZ established its Sustainable Digital Special Interest Group (SIG) to shape and drive our work programme in this critical area of challenge. Digital sustainability was reinforced as a key priority for the DIZ at its strategic priority-setting session in September 2023.

Led by the DIZ Executive Board elected member for Uttlesford DC, membership of the SIG was initially drawn from a small number of sustainability and digital officers at partner

authorities keen to explore the impact of digital on our organisational climate change and net zero commitments. Recognising that the SIG could not address all matters relating to sustainability, the SIG will explore emerging digital applications in relation to, and of benefit to, responding to issues of sustainability, carbon reduction and climate change, specifically as they pertain to the local delivery of services by the DIZ and its partners, with a further distinction to be drawn between:

- * Services and workstreams under the direct control of DIZ partners
- * Externally delivered services and work where DIZ partners can influence or facilitate responses

Additionally, the SIG will consider how existing products, technologies and applications might be better used or promoted, to help inspire others to follow examples of good practice and lead on the development of a DIZ Sustainable Digital Charter for public sector partners and promote its adoption.

The SIG has also settled on the following definition of sustainable digital to guide its work:

"We understand digital sustainability as applying social, economic, and environmental stewardship principles to the responsible adoption and use of digital technology to

(5) - The SIG acknowledges <https://smowl.net/en/blog/digital-sustainability/> and <https://www.unsustainablemagazine.com/digital-sustainability-guide/> as sources for this blended definition.



positively impact society and the environment in the long term. This includes considering energy efficiency, sustainability in producing and disposing of electronic devices, and minimizing digital waste, among other factors. It also encompasses the ethical and responsible use of data and technology to protect privacy and promote a fair digital economy”⁽⁵⁾

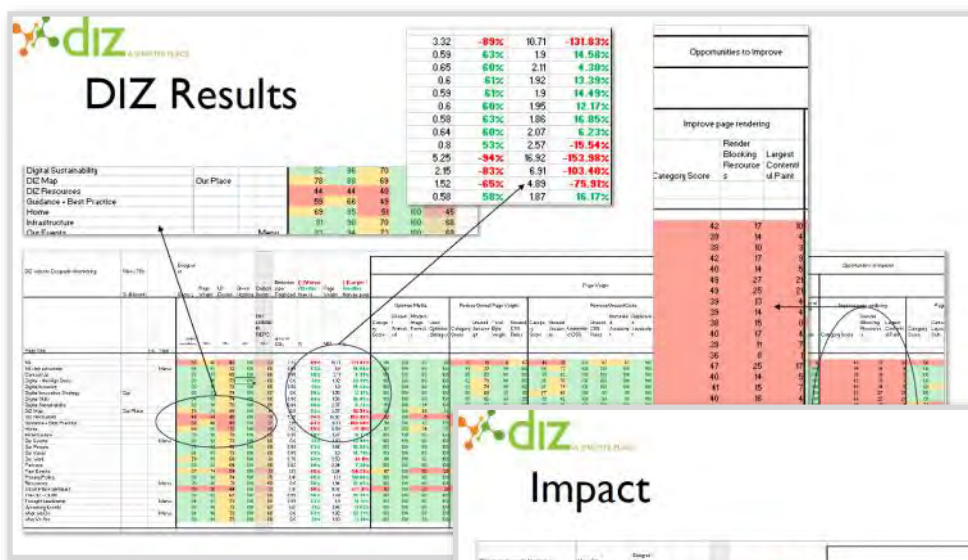
In order to define and shape a work programme that the SIG could deliver, the group held an in-person workshop to explore the sustainability issues, opportunities and challenges our partner organisations are facing. The SIG also took this opportunity to invite in participants from a much wider background and it is hoped that this will lead to ongoing participation in the SIG from this larger cohort.

Using a methodology developed by the Design Council, the workshop examined these issues in terms of both how we might address the carbon footprint of digital technology but also how

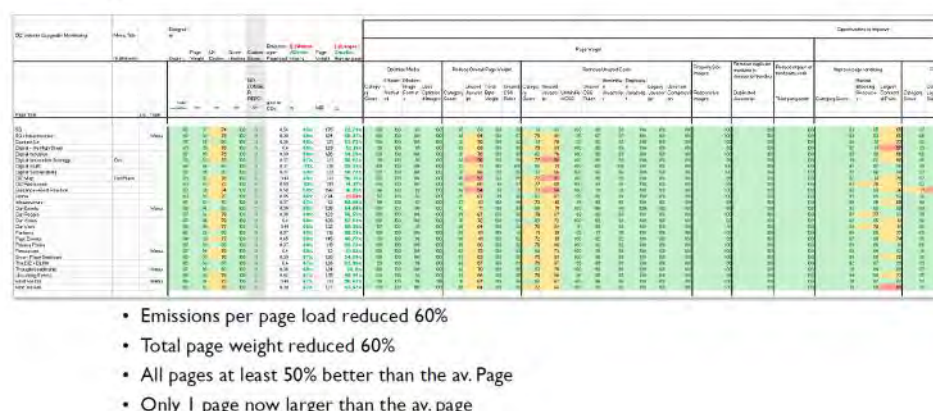
digital technology might help address the footprint of traditionally non-digital services. The ideas generated were then refined according to priority and difficulty to identify the strategically important opportunities but also potential quick wins and others that would provide a return on investment.

These summarised lists will now be presented back to the SIG to further refine the priorities into a work programme that the SIG might reasonably be able to deliver.

In addition to this long-term planning for the group’s work programme, the SIG was also keen to undertake, in parallel, an early sustainability project in order to demonstrate the positive impact of addressing our digital carbon footprint and act as a pilot for wider work. Using the ecograder.com reporting tool as a baseline, the DIZ website was analysed in full in order to identify if particular pages were having a disproportionate impact, but also to explore whether a targeted revision and refresh of the



* Impact of website revisions based upon ecograder.com reporting at the time of the revisions ie. December 2023



web content could deliver a positive impact.

This discovery work highlighted that, whilst there was lots of good about the DIZ website, there were many pages that needed attention and scored very badly. A number of pages were shown to be significantly 'worse' than all other pages visited as well as being significantly larger in terms of page weight than the average web page visited.

Efforts were targeted at the 'opportunities for improvement' identified by the ecograder.com reports and that showed the greatest likely carbon savings and emission reductions. These included the removal of widgets, embedded videos and unnecessary graphics as well as the resizing and reformatting of all images used.

The impact of this work was established through another full analysis of the website and the results showed significant improvements including*:

- Emissions per page load reduced 60%

- Total page weight reduced 60%

- All pages at least 50% better than the av. Page

- Only 1 page now larger than the av. Page

The value of this approach had been demonstrated and the next steps for the project are to develop an approach that can address the carbon footprints of the DIZ partner websites and associated sites. These are considerably larger in scale and therefore the group will work to establish the feasibility of large-scale domain-wide enhancements, to establish the potential scope for savings and to identify funding and resources to deliver the work.

There are also plans to produce a case study of the work completed on the website and develop 'best practice' guidance on sustainable website content for some of those responsible for web content but without detailed technical knowledge of the sustainability impacts.

For information on the DIZ sustainability work programme go to <https://diz.org.uk/digital-sustainability/>.



Working together to make our place digitally ready...

Building on experience of previous projects such as the delivery of the Local Full Fibre Network (LFFN) infrastructure into 74 GP surgeries across the DIZ, we have continued to work closely with our local partners to explore new digital and funding opportunities for our place.

In conjunction with Essex CC and Hertfordshire CC, the DIZ worked on a collaborative bid to the DSIT funded 5G Innovation Regions programme. Securing funding in such highly competitive programmes can never guarantee success but the work done to prepare this bid has set strong foundations for future bids as and when the opportunities arise.

The DIZ also closely supported Essex CC in its bid to the Innovate UK Smart Grant programme, working up a number of use cases for the application of digital twin and artificial intelligence models, including the use of models to monitor the relationship between traffic congestion and pollution in Epping Forest and to predict patterns of pollution to support future interventions.

Anglia Ruskin University submitted a bid to the EPSRC Place-Based Infrastructure Acceleration Account competition, again with support and contributions from the DIZ as one of the planned steering group partners.

Making sure our place is on the digital map...

A large element of the work the DIZ does to attract guest speakers to its board meetings and seminars is aimed at raising the profile of the DIZ as a place that is ready to support digital innovation and investment. Bringing these experts to our place helps to make them aware that our partners are supportive of digital innovation and keen to explore new digital opportunities.

At the same time, the DIZ is always keen to go out and present its own story at events and to interested organisations. In early 2024, the DIZ delivered a guest lecture to students at Anglia Ruskin University on its place-based approach to digital innovation. We have also, in the last year, engaged with numerous organisations, each occupying their own particular place within the digital innovation landscape including Freshwave, Farrpoint, Innovate UK, Tech East, Cambridge Wireless, Green Web Foundation, Mightybytes, Makutu, BT and more.

To support this 'outward facing' engagement activity, the DIZ is developing a series of case study documents to highlight the work it has done over recent years. Case studies on the LFFN project and the knowledge uplift programme are being finalised with plans for further case studies to follow and these will be hosted on the DIZ website at diz.org.uk/diz-resources/.

Helping everyone to get ready for digital...

The DIZ remains committed to ensuring no-one is left behind by the rapidly changing digital world we live in. Throughout its existence the DIZ has sought to support the work of its local, expert digital inclusion partners and this has continued over the last twelve months.

The WECAN Digital Share project, for which DIZ undertakes a role on its steering group, has continued to flourish. In the twelve months to April 2024 it increased its number of digital hubs to seven across west Essex; conducted basic skills sessions on access to therapies and support services, job searches, and benefit support; provided training on topics such as online banking, form filling and using the NHS app and; facilitated digital connections to enable individuals to link up with friends and family to address loneliness and isolation.

WECAN have also continued to provide devices and data to socially disadvantaged individuals, all the while building a network of support that enhances their ability to meet the needs of the community effectively. The year has seen 136 new people attend ongoing sessions; 803 skills sessions delivered; 46 devices donated and 17,130 GB of data donated to residents.

The DIZ has also been working closely with partner colleagues from Epping Forest DC and the Digital Essex team to explore the potential for a digital inclusion project to support

residents of a sheltered housing scheme, many of whom will have no experience of online activity, applications or services. Working with a fibre network provider and a managed service provider, the project will pilot the provision of communal connectivity to the scheme with the intention of using that connectivity to deliver digital inclusion training sessions.

The sessions will take account of the lack of experience of the residents and work to build their confidence and understanding of the online world through applications that bring real value to their lives. This might be demonstrating how they can use the NHS app to access their health records and book local GP appointments, giving them access to ancestry information for family history or just helping them to use technology to stay connected with relatives.

The Digital Essex team has also been involved in a number of our DIZ Advisory Board guest speakers sessions this year, bringing some key digital exclusion issues to the attention of the partnership. The upcoming switch off of the PSTN network and move to internet telephone connectivity was covered by the team along with a session on the availability and take-up of social tariffs for broadband connectivity. They also introduced the Essex CC team that delivered a presentation on the Lego In Libraries Project.



(c) [“By In-Press Photography via
Centre for Ageing Better”](#)



What lies ahead...

Artificial intelligence! Data! Digital inclusion! Sustainability! Connectivity! Digital twins! Cyber-security! Digital skills! Innovation! Social media! Internet of Things!

If there is one certainty we can rely upon and prepare for over the months and years ahead, it is that all of the 'digital' topics above and many, many more besides, will continue to bring forward challenges and opportunities for our place, our organisations, our residents and our businesses.

As a partnership, the DIZ will endeavour to ensure it continues to bring value to its partners. It will look to do this in two ways. First of all, by continuing to collaborate with partners to actively support their work, bringing additional capacity and expertise where it is needed and appropriate and helping them to deliver their digital objectives. And then also, by continuing to explore opportunities for DIZ-led initiatives that pick up areas of interest that might be beyond the 'business as usual' activities of our partners or where other priorities limit capacity to explore these issues.

Working to ensure our digital innovation is environmentally sustainable will continue to be a priority workstream for the DIZ. Whether that is in relation to our corporate websites, the application of artificial intelligence or the ways that we collect, store, work with and analyse

our data, it is important that the benefits realised from what we are doing are not outweighed by the environmental impact.

And data is likely to be key to all of this. The DIZ has already kicked off its work on data through the 'How Can Data Transform Our Place?' Smart Place Seminar earlier this year and the challenge now is to explore how each of our partner organisations, both individually and collectively, can make the best use of the data it can access. The DIZ will work to promote examples of data 'best practice', both locally and nationally, and look to explore how specific data initiatives might be ethically and securely applied to the planning and delivery of our services.

The DIZ remains committed to doing what it can to ensure no-one is left behind by the rapid pace of digital innovation. We will continue to support our expert colleagues, both within our local authority partners and amongst our community and voluntary sector partners, and we will promote regional and national initiatives where appropriate as part of our ongoing knowledge uplift programme.

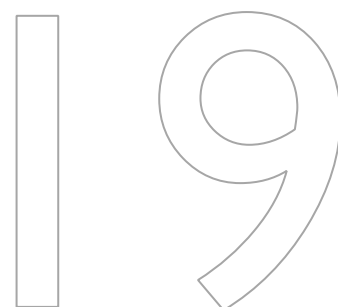
Knowledge sharing will remain a key priority for the DIZ in the next year or so. We will look to ensure our partners are equipped to continue their own organisational journeys through the digital landscape with the confidence to take advantage of all it has to offer and to address any

challenges or issues that might arise.

Do look out for details of upcoming Smart Place Seminars as they emerge and if you are interested in attending our DIZ Advisory Board sessions, or potentially presenting to one, please do get in touch with the DIZ team and we would be happy to extend an invitation. Finally, if you would like to subscribe to the DIZ Weekly Weblinks Newsletter do just drop us a line and we can add you to the distribution list.

Here's to another year of digital innovation ahead.

The DIZ Team



About the DIZ...

While the partners of the DIZ, individually and collectively, are committed to innovate and flex an approach to deliver a better served, better connected place, our mission statement remains the same:

To be the best connected place of its type in the UK.

A place of innovation and inclusion.

A place where the benefits of digital investment are harnessed, maximised and shared across residents, commuters, businesses and borders.

For more information about the DIZ and its work programme and to explore opportunities to get involved, please get in touch:

Mike Warr, DIZ Programme Manager + Acting Director

mwarr@eppingforestdc.gov.uk



Thank you to our core funding local authority partners for making the work programme of the DIZ possible:



Uttlesford District Council