



Smart Cities – Back-to-Basics Approach

The potential for smart cities has grown by leaps and bounds, but with public sector budgets squeezed what does it take for wide scale digital transformation to succeed in a cash-strapped, highly regulated world, where any tech advancement must be inclusive and cater for all?

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Over the past decade, worldwide awareness of the potential of smart cities has grown by leaps and bounds. Countries, cities, provinces and governments have realised that they can improve the lives of millions of citizens with the opportunities that digital transformation and revolutionary technology offer.

In Helsinki's Smart Kalasatama district, for example, co-creation and agile development take centre stage. Its residents are the initiators and testers of new technology and smart services – and the local authority reports that it wants to become so efficient that its residents gain one hour of extra time per day.

Smart projects in the district include parking places with car charging facilities as well as automated waste collection systems that reduce the traffic of garbage trucks by up to 90%. Added to this, the municipality is embracing smart grids and real-time energy monitoring pilots that aim for a 15% reduction in energy usage, and apps that plan the most efficient traffic routes with any type of transportation method.

In the smart education world, Finnish schools are widely known for their forward-thinking education systems and are moving away from conventional pedagogy towards a more inquiry-based method of learning. Open data innovation, hackathons as well as open app competitions are part of this and are held on an annual basis.

Businesses too are benefiting from a smart city environment, seeing greater efficiency in their operations and ultimately better service to customers. For instance, improved traffic management will improve supply chain and logistics for online retailers, whilst smart lighting may improve footfall around physical shopping centres, boosting sales for local businesses.

A back-to-basics approach to a high-tech world
A broad and collaborative approach to smart living is vital to public sector digital transformation, and the UK could learn lessons from other territories in what success looks like.

But truly transforming government through the power of digital technologies will be a journey, and schemes like those in Helsinki and beyond are only possible when the IT Infrastructure is in place to support them. Digital infrastructures must be able to physically link dispersed machines and sensors, so they can exchange information in real time – and to tap into the potential value of big data, interconnections between people and applications, data, content, clouds, and networking needs to be seamless.

Being able to store data effectively, and being able to access and interpret it as meaningful actionable information, is vitally important to organizations across the board – and will give huge advantage to the institutions that do it well. On the flip side, the implications of not getting it right are significant.



Helsinki



Failures in the network could result in transport systems being shut down, power outages and huge disruption to citizens.

This means that it's absolutely crucial that public sector organisations have the right infrastructure in place to support the demands of technology powered living. Lots of connectivity, storage and computing power is required – and this is facilitated by the data centre.

When it comes to getting the data centre strategy right, government departments and local authorities have significant challenges to overcome. Most will have to mix the old and the new – dealing with legacy infrastructure as well as creating new facilities. For some this might mean that traditional “core” connectivity hubs will have to work alongside smaller data centres optimized for Edge computing. As more and more applications are required to service immediate engagement – such as media streaming or payments – data centres must be placed correctly for this type of need too.

Indeed, the extensive nature of digital transformation needs something beyond a company or Government department's in-house storage capabilities and this presents significant opportunities for data centre providers to help. Already we are seeing many government departments and wider organisations are turning to third party IT suppliers to help them navigate their data centre strategies – engaging with colocation facilities that provide the best in interconnectivity, flexibility and scalability. This is a trend which looks set to continue and grow.

In conclusion

For any wide scale digital transformation to succeed, it's vital to start with getting the basics right – ensuring impact of new technologies on infrastructure is managed. Indeed, it's no exaggeration to say that as our UK cities grow, whether they thrive and deliver a good quality of life to millions of citizens is down to the IT backbone that underpins them.

It's vital for digitally savvy public sector organizations to look “under the hood” at the infrastructure. Whilst front-end products and services are shaping a new approach in digital government, it's the back end, the IT, which powers it. This means that the public sector's focus now needs to be firmly on the data centre.



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Darren began his career as a graduate Military Officer in the RAF before moving into the commercial sector. He brings over 20 years experience in telecommunications and managed services gained at BT, MFS Worldcom, Level3 Communications, Attenda and COLT.

He joined the VIRTUS team from euNetworks where he was Head of Sales for the UK, leading market changing deals with a number of large financial institutions and media agencies, and growing the company's expertise in low latency trading.

Additionally, he sits on the board of one of the industry's most innovative Mobile Media Advertising companies, Odyssey Mobile Interaction, and is interested in all new developments in this sector. Darren has an honours degree in Electronic and Electrical Engineering from University of Wales, College Swansea.

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