

developing a MyCity vision for a digital Birmingham



Worldwide the race is on to create digitally connected cities that can flourish and function in ways that attract investment, generate employment, promote sustainability and offer a better quality of life to their citizens. Birmingham in the UK is meeting this challenge, supported by MyCity from Atos

Connecting the smart, people-centric city

At its height, Birmingham was one of the world's most powerful and productive cities. But following the decline of its traditional industries and massive socio-economic change, it has had to reinvent itself, fast. Using enhanced connectivity as a strategic tool for transformation and economic growth, the Digital Birmingham initiative was launched in 2006.

However, a key issue for Birmingham City Council - as for many municipal leaders - has been how to overcome complex technical, logistical and political planning barriers to translate its digital vision into practical grass roots reality. The barriers encountered by Birmingham are common to many cities seeking to transform into a digital-friendly environment:

- ▶ Lack of statutory authority to enforce specific technology requirements
- ▶ Absence of universal standards to, for example, enable open infrastructures
- ▶ Complex, disparate networks owned and operated by multiple vendors
- ▶ Fragmented and incomplete GIS information about city utilities
- ▶ Slow pace and bureaucratic nature of civic planning processes
- ▶ Rising demand for high-speed connectivity via multiple devices
- ▶ Need for more bandwidth and power for data-intensive services.

Raising the game

In 2013, the Digital Birmingham team was ready to take its ambition to the next level in a bid to once again become a truly world-class city. So when the city development plan was due for review, they had the ideal opportunity to make a big change happen.

To support the drive for productivity, jobs and higher living standards, the team wanted to:

- ▶ **Embed digital connectivity as the 'fourth utility' - adopting the principles of digital by default - into a coordinated smart city strategy**
- ▶ **Ramp up capacity across the city to fully exploit technologies like big data, machine-to-machine (Internet of things), smart metering and smart mobility**
- ▶ **Improve existing services and deliver new ones**
- ▶ **Encourage integration to maximize efficiencies and minimize waste**
- ▶ **Accelerate the pace of digital development in all aspects of city life**
- ▶ **Enable more inclusive services that are accessible by all sectors of society**
- ▶ **Share resources and create a more open, collaborative culture.**

The test, of course, was to overcome these challenges and realize the aims. To do that, Digital Birmingham required a set of clear guiding principles to ensure that future city development would be more coherent, more consistently aligned to long-term policy needs and as future-proof as possible. Atos was selected by the Digital Birmingham team to advise on the development of a comprehensive plan incorporating our MyCity methodologies and approaches to digital city challenges. Acting as an expert independent partner, we provided critical thinking and an impartial, top-level view of the issues and potential solutions.

Designing the framework

In June 2013 we embarked on a consultancy project to help deliver a strategic digital framework for development across the city.

Birmingham's Smart City Commission outlined how it wanted to integrate, collaborate, pool resources, share information and consult with the widest range of stakeholders to identify every potential opportunity. Atos marshaled resources and formed a working party with representatives from academia, business, the construction sector, planning departments and economic development community.

Through planning policy workshops, research and deep analysis, we compiled a detailed picture and applied further strategic insight to shape our recommendations.

Setting out digital principles

One of the key outputs from our work was Digital Development for a Smart City - a set of ten guiding principles tailored to Birmingham's unique needs. This combined roadmapping, policy recommendations, checklists and best practice guidelines that could be incorporated into the new city development plan.

In turn, this reflected the need for more agile planning processes that allow for unpredictable uptake of technology. At the same time the plan was designed to assess how new developments should provide the infrastructure - for example, wired, wireless and mains power - to enable high-speed ubiquitous internet access.

Key aspects of the blueprint for Birmingham were:

- ▶ **Adherence to open technical standards where feasible**
- ▶ **Scalability to meet rising demand for power and bandwidth**
- ▶ **Encouraging providers and utility suppliers to create open infrastructures and share assets such as chambers, ducting and service pipes**
- ▶ **Open access to data created during the planning process that could be used to reduce energy consumption and deliver other civic benefits**
- ▶ **Adoption of shared or multi-supplier external infrastructures and related data to reduce total cost and minimize future disruption to highways and other public spaces**
- ▶ **Commitment from developers to include online, social media and other technologies within public consultation to maximize engagement.**

Equipped with the blueprint, Birmingham City Council now has a clear set of principles and guidelines that it can incorporate into routine planning and regeneration procedures to ensure that its digital strategy is implemented. One way, for instance, is by setting a minimum specification for digital provision for future commercial, residential and public sector construction projects.

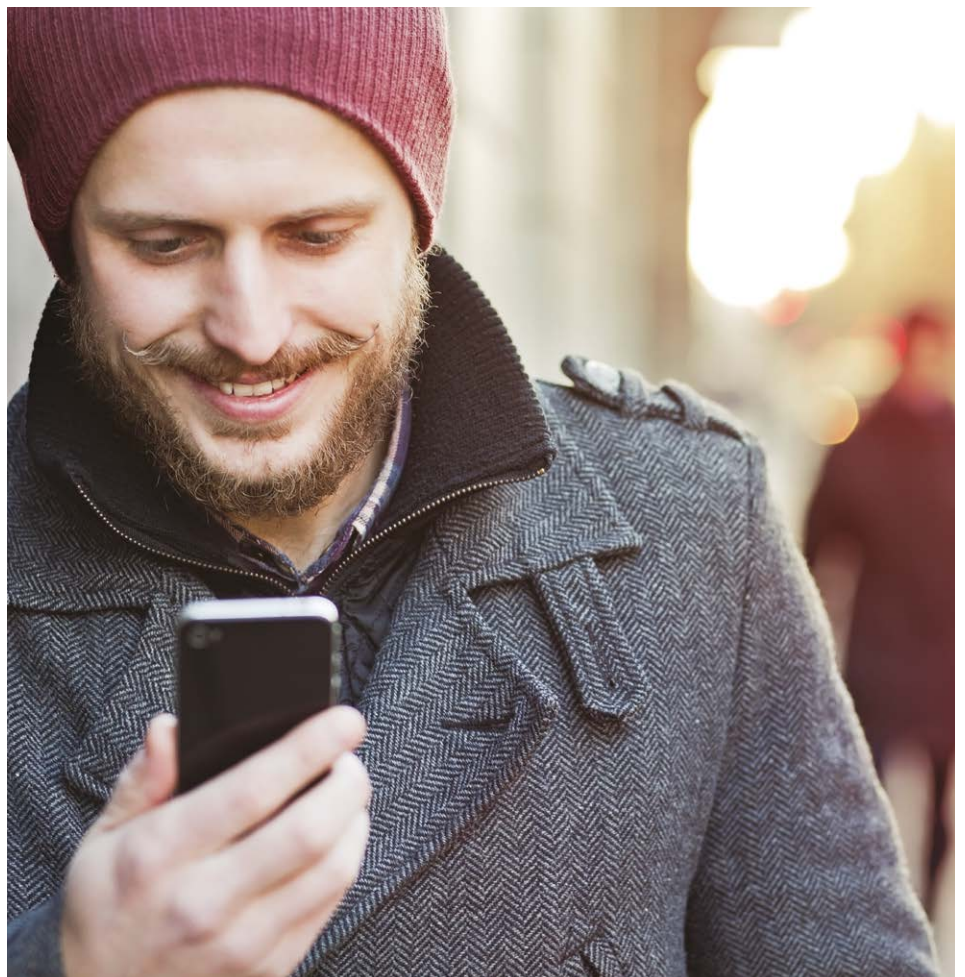
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Benefitting the whole community

Through the creation of practical tools to bring its digital city vision to life, Birmingham City Council is taking the essential steps to stimulate and support a dynamic, vibrant data ecosystem that enables the whole urban community to benefit from more intelligent exchange of information – so that citizens and local government can come together more effectively and efficiently. This is an essential part of Birmingham's vision and will enable faster, more reliable access to innovative new services that could include:

- ▶ **Making it easier to work, commute and connect to high-speed services anywhere in the city via provision of free wifi access and internet in all public spaces**
- ▶ **Enabling more flexible remote and home-working that will in turn impact on energy, travel and parking patterns**
- ▶ **Reducing congestion with smart mobility solutions including intelligent parking, electric vehicles and pay-as-you-go car hire**
- ▶ **Nurturing new opportunities in education for learning and skills development**
- ▶ **Encouraging innovation, enterprise and creative disruption by setting up business incubators, hubs and office space for start-ups and small businesses**
- ▶ **Creating a cleaner, greener city by managing smart grids to reduce energy consumption and cut carbon emissions**
- ▶ **Conserving energy via smart metering, remote monitoring, centralized control of heating public buildings and street lighting**
- ▶ **Using telemedicine to connect homes to hospitals and other care services**
- ▶ **Engaging directly with the public via more transparent local government and wider access to data and services.**

The policies also support the government's broadband strategy, aimed at reducing infrastructure costs, promoting appropriate sizing and driving towards the EU target to provide 30Mbps connectivity to all residents by 2020. As a consequence of its work in Birmingham, Atos has been invited by the UK government's Business and Skills Department to sit on a new national advisory forum for digital city developments and as part of the interoperability forum for a key UK think tank. We are also working with the British Standards Institute (BSI) to establish a UK standard for smart cities.



Making every city MyCity

Not only will other UK cities be looking to emulate Birmingham's example, its commitment to a digital future is attracting the attention of other cities worldwide. Like Birmingham, all cities are under pressure to compete as vibrant, successful socio-economic entities. Increasingly, this demands new partnerships between citizens, government and business combined with technology-driven services that create more efficient, effective and enjoyable ways for people to live within a modern municipality. Atos is taking a lead in enabling urban development to deliver more flexible, citizen-centered, responsive and sustainable services – our MyCity vision.

Developed with these aspirations in mind, MyCity solutions connect citizens to digitally enabled services when and how they want. Covering eight core areas – connectivity, sustainability, enterprise, local government, transport, security, health and education – the different elements can be combined in infinite ways to suit the individual character of any modern city. It's a proven approach that delivers short-term wins while creating the long-term, sustainable foundations for future success.

Next steps

Transform your city with MyCity. To discover how Atos can transform your town, city or region into a truly connected community, visit: atos.net/mycity



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About Atos

Atos SE (Societas Europaea) is an international information technology services company with 2013 annual revenue of €8.6 billion and 76,300 employees in 52 countries. Serving a global client base, it delivers IT services in 3 domains, Consulting & Technology Services, Systems Integration and Managed Services & BPO, and transactional services through Worldline. With its deep technology expertise and industry knowledge, it works with clients across the following market sectors: Manufacturing, Retail & Services; Public sector, Healthcare & Transports; Financial Services; Telco, Media & Utilities.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. It is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and is quoted on the NYSE Euronext Paris market. Atos operates under the brands Atos, Atos Consulting & Technology Services, Worldline and Atos Worldgrid.

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