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## TURNING THE DIGITAL DIVIDE INTO A DIGITAL DIVIDEND: Some Experiences from Manchester, UK

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### Abstract

*This paper focuses on the ways that innovative applications of digital technologies are being developed in Manchester (in the North West of England) and in the UK's largest urban regeneration area, East Manchester, with the aim of tackling the "digital divide," reengaging citizens in civic life, and transforming the delivery of public services in the context of urban regeneration. The paper suggests that sustainable regeneration requires a much more holistic approach to urban development than has been the case in previous strategies and policies and can benefit from using digital technologies. In order to turn the digital divide into a "digital dividend," more emphasis needs to be placed on citizen engagement, empowerment and capacity building. This case study aims to provide examples of how a multi-agency partnership approach is working to tackle these challenges through the "ONE-Manchester" initiative (Open Network E-Manchester).*

### Keywords

Digital divide, urban regeneration

## 1 URBAN REGENERATION IN MANCHESTER

Urban regeneration is an essential prerequisite for tackling social exclusion and economic restructuring. Cities across the world face similar challenges in terms of finding coherent and effective policies and strategies that will support and sustain economic growth and connect the opportunities created by economic growth with the needs of their citizens. The emergence of the information society has added new complexities to this process,

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on the one hand adding to the speed and scale of change while on the other hand providing new tools and processes which can help to mitigate the impact of that change.

Manchester (in the North West of England) has experienced new economic growth developing side by side with persistently high levels of unemployment, poverty, and social exclusion. It has the third highest rate of multiple deprivation (apart from Liverpool and Knowsley) and the highest rate of child poverty in the UK. This “tale of two cities” syndrome (as it has been referred to) threatens to undermine the longer term sustainability of economic development and growth. Manchester City Council has responded to this challenge by identifying information and communication technologies (ICTs) and digital media (referred to in this paper as digital technologies) as an important cross-cutting theme within its City-Region Economic Development Strategy and Plan. The aim is that digital technologies should be used to increase citizens’ access to skills, jobs, and services and to support greater participation in civic life, including in the regeneration process itself.

A major influence on this approach is the experience gained in East Manchester where the City Council has formed an urban regeneration company (URC), New East Manchester (NEM) Ltd., a public-private-community partnership operating on a not-for-profit basis. An online community network, run in partnership with local citizens organizations and representatives, known as Eastserve was established here in 2001.

This is supported by a new city-wide initiative, the Manchester Digital Development Agency (MDDA), established in 2003 with the mission

*To make Manchester a leading world class digital city, having one of the most competitive broadband infrastructures in Europe, attracting and sustaining investment in ICT and e-commerce across all sectors of the economy, generating new businesses, developing new learning cultures, promoting social inclusion and providing all residents with the skills and aspirations to play a full role in the information society.<sup>1</sup>*

The objective is that the Manchester city-region can become one of the most competitive yet inclusive e-enabled urban environments in the world, based on a world-class and comprehensive broadband infrastructure which is used to promote access, skills, jobs, and sustainable economic growth. Through the work of the MDDA the City Council and its local strategic partnership (LSP)<sup>2</sup> aim to ensure that local people can develop the skills required to participate fully in the emerging information society and to be able to take advantage of the new training and employment opportunities that are becoming available.

The Eastserve project<sup>3</sup> works with existing community based ICT access centers, known as UKOnline Centres, across the city and related projects which promote the take-up and use of digital technologies by small businesses and social enterprises. This work

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<sup>1</sup>From the MDDA website, [www.manchesterdda.com](http://www.manchesterdda.com).

<sup>2</sup>See the Manchester Partnership website at [www.manchesterpartnership.org.uk](http://www.manchesterpartnership.org.uk).

<sup>3</sup>See the Eastserve project website at [www.eastserve.com](http://www.eastserve.com).

builds upon national<sup>4</sup> and local<sup>5</sup> policy frameworks focusing on digital inclusion as well as good practice examples identified through national initiatives such as the UK Communities Online network.<sup>6</sup>

These initiatives are aiming to achieve real and lasting benefits for citizens around three key issues that need to be addressed within this approach:

- How new e-services can be developed which engage citizens, drive take-up of eGovernment services and support the regeneration of urban neighborhoods.
- What barriers to take-up are being identified and how these can be challenged through new working relationships being developed between city administrations, citizens, and businesses.
- Ways in which innovation, in terms of both technologies and business models, can support organizational transformation and be sustained.

## **2 CHALLENGING THE DIGITAL DIVIDE**

Many residents in the East Manchester area use mobile phones rather than fixed telephone lines. The initial survey work undertaken by the area regeneration partnership (in 2001) revealed that more than 25 percent of homes no longer used land lines. This led to changes to the initial aims and objectives of the project which had been to provide PCs to households with dial-up Internet access. This meant that a system of wireless broadband connectivity was required, which then enabled households to access the Internet and on-line services.

More than 2,000 of the area's homes now have wireless broadband Internet connections, as well as 17 local schools, 8 "UKOnline" community access centers, and 10 public access points in libraries and other centers. They all connect to a 100Mbps licensed wireless backbone linking four tower blocks around the East Manchester area from where bandwidth is distributed over a wireless network.

Schools and public buildings receive an online community service, developed by Eastserve, and relay it to other residential locations. These locations are grouped in clusters and communicate with one another wirelessly via a radio dish antenna connected to a wireless bridge. This is one of the largest community based all-wireless broadband networks in Europe and the largest community regeneration initiative using digital technologies in the UK. In spite of being one of the poorest areas in the city, the take-up of broadband in the area is far higher than the city-wide rate and residents are using their new skills to improve their access to training and jobs. The project aims to be financially self-sufficient within 2 years.

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<sup>4</sup>Department of Trade and Industry (UK), "Closing the Digital Divide: Information and Communication Technologies in Deprived Areas," Report by the Social Exclusion Unit Policy Action Team 15, DTI, London, March 2000.

<sup>5</sup>Manchester City Council, "Tackling The Digital Divide Project Report." MCC, Manchester, July 2002.

<sup>6</sup>Communities On-Line, "Local Connections: Making the Net Work for Neighbourhood Renewal," COL, London, 1999.

The initial evaluation of the impact of the project has shown that Eastserve users are

- more aware of job opportunities
- want access to more training
- more likely to seek work
- more likely to take part in other educational opportunities
- more likely to be looking for new challenges
- more interested in running their own businesses

Plans are now going ahead to expand the current user coverage from about 5,000 households to more than 10,000 households during 2007 and then to more than 50,000 households by 2010, expanding population coverage from around 20,000 people to more than 250,000. Over 40 percent of residents have now had basic ICT training because of Eastserve, more than double the rate of most areas in the city, and 20 percent of these are moving on to extended courses which provide opportunities for accreditation.

### **3 DIGITAL INCLUSION AND URBAN REGENERATION**

Manchester is the UK's second largest metropolitan area outside of London, with a population of over 2.5 million in the Greater Manchester city-region. At its core is the City of Manchester, the first industrial urban area in the world and the "original, modern" city. Alongside the city's transformation from industrial to knowledge economy is the legacy of high levels of unemployment and poverty from the experience and impact of the economic restructuring of the 1970s and 1980s. Much of this legacy is concentrated in the traditional industrial manufacturing area of the city, in East Manchester. Once home to more than 100,000, its population has declined significantly, to less than 30,000 people.

East Manchester is a regeneration challenge of regional and national significance. An area of 1,100 hectares situated immediately east of Manchester's City Centre, East Manchester presents an opportunity for regeneration on a scale and diversity almost unprecedented in an English city. There are unique opportunities for the renaissance of the area as a focus for the knowledge-driven economy of the 21<sup>st</sup> century. These opportunities have been generated by

- A range of regeneration initiatives focusing upon East Manchester to address many of the physical, economic, and social problems in the area
- The stimulus provided by a buoyant economy within Manchester and the major investment attracted through the staging of the Commonwealth Games in 2002
- The strong commitment by government to the success of cities and to tackling the most acute areas of deprivation
- The strong partnership between the local community and national, regional, and local government

A key component of any regeneration challenge in the 21<sup>st</sup> century is the role of technology in its many forms. Digital technologies are having an ever-increasing effect on

all of our lives and are essential to the development of a strong economic base and an improved quality of life for citizens within an area such as East Manchester.

In looking to expand this strategic approach across the whole of the city-region, Manchester City Council and its partners within the LSP have linked up with three neighboring municipalities, Tameside, Salford, and Oldham, and their strategic partnerships to create ONE-Manchester (Open Network E-Manchester). ONE-Manchester is a new partnership which brings together the public sector, private sector, and voluntary/community sector around the idea of “turning the digital divide into a digital dividend.”<sup>7</sup> This is looking at the longer term sustainability of digital inclusion policies and practices by developing a new collaborative delivery mechanism for digitally enabled services and social networking. It also aims to provide a sustainable digital development model which can be used to create social capital and community cohesion by

- Building on the “sense of place” through the development of geographically focused digital action places
- Transforming community capability and developing innovative content through improved access to e-services and content with proposals for the NetStart program
- Ensuring sustainability through a new digital cooperative which would coordinate and support local, regional, and national initiatives and realize the benefits of the digital dividend

ONE-Manchester is about taking the experience gained on innovative digital inclusion projects in which the partners are involved, such as Eastserve in East Manchester and eTameside, and using this to create an exemplar to stimulate and support digital inclusion initiatives across the city-region, the region, and nationally. This is based on imagining a Manchester in which people have a real personal stake in digitally enabled living and a new sense of pride in their achievements as one of the most connected and cooperative communities in the world.

ONE-Manchester’s aim is mainstreaming innovation by developing a dynamic collaborative platform which will enable people, both individually and collectively, to become stakeholders in a new way of social networking through the digital cooperative. People need to be able to share their skills and knowledge, develop new digital applications and services, and create added value in the form of a digital dividend. ONE-Manchester’s proposal is based on the four core principles of social cohesion:

- Creating a common vision and a sense of belonging for all communities through imaginative uses of digital technologies to help to transform lives
- Ensuring that diversity is appreciated and positively rewarded through improved accessibility of digital technologies to support social networking
- Engaging people from different backgrounds through the use of digital technologies which enables them to have similar life chances

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<sup>7</sup>This is the central theme of the ONE-Manchester Digital Challenge bid ([www.manchesterdda.com/digitalchallenge/158/](http://www.manchesterdda.com/digitalchallenge/158/)). The UK Digital Challenge site is located at [www.digitalchallenge.gov.uk](http://www.digitalchallenge.gov.uk).

- Encouraging strong and positive relationships to be developed between people from different backgrounds in the workplace, in education, and within neighborhoods by using digital technologies to break down barriers and promote social cohesion

## 4 TRANSFORMING COMMUNITIES THROUGH NEIGHBORHOOD EMPOWERMENT

ONE-Manchester's idea of turning the digital divide into a digital dividend is about enabling everyone in the community, no matter how excluded and disadvantaged, to gain a stake in the knowledge economy and to use it to provide themselves with a better life, particularly in terms of work, skills, and health.

The first stage of ONE-Manchester's journey of transformation is to start where people are located. In some places people are starting to do things for themselves: making the most out of the great investment that has been made in specific areas to date, such as Eastserve and eTameside; taking the lessons of the digital pioneers who initiated digital development in Manchester over the past 20 years; getting users involved in generating their own content and using that to develop new e-services with a mutual aid ethos.

The next stage is to develop a new set of tools, building on these foundations to provide everyone with the capacity to use digital technologies to transform their lives. Whatever the technology—computers, mobile phones, digital TV, assistive technologies in the home—people want to be “ready,” to be able to deal with the inevitable change that they will face in the future. Whoever is working with people—public, private, and voluntary sectors—there is an equal sense of needing to be better prepared, to be ready, to manage change and create a renewed sense of cooperation and partnership. There is a similar need to be able to use digital technologies as an effective tool in making this happen.

ONE-Manchester is, therefore, about building on this experience and using the partners' proven track record in delivering projects which transform people's lives, from Eastserve to the Commonwealth Games, to create a new, imaginative, and sustainable digital city-region.

We start off by taking people's real experiences of both the challenges and the benefits of using technologies in this way. We have illustrated these through a series of “user journeys” based on archetypes developed through community engagement and consultations.

This led to the three core elements of the ONE-Manchester strategy:

- (1) the focus on the sense of place with geographically based digital action places where the effort is concentrated
- (2) stimulating community engagement and social capital, including innovative content, with the NetStart program
- (3) promoting mutual aid to reflect the cooperative nature of the best of what is possible in the digital age with the proposal for a digital cooperative which will be the centerpiece of the project's economic sustainability

These will be underpinned by focusing on technology and applications that enable delivery of national-local service agreements, known as local area agreements, in each local authority area.

The geographic focus based on digital action places will have the resources and processes to deliver personalized NetStart action plans to local residents and organizations. This process will be like setting up a franchise (e.g., a shop selling fair-trade goods): it has local flavor and focus but draws on central support/processes, the proposed ONE-Manchester services catalog, including training materials, equipment discount deals, guides to content, and technical support services.

NetStart provides people with the capability and connectivity to access content and services most relevant to them, with a particular reference to work/skills and health/liveability. The precise size and shape of support will depend on need and funding available, but the aim is to ensure that delivery on the most flexible/adaptable basis possible.

All of this will fit together into what we see as a digital matrix, with the digital cooperative at the center and a commitment to make the city-region the UK's first "IP-City" with everyone, everything and everywhere connected using IP (Internet protocol). Backing this up the content/services access mechanism which we have called the "MyCommunity Gateway" will enable users to get to relevant content/services.

Each user journey starts with

- Engagement with the local digital action place with the method depending on locality and approach taken to engagement
- NetStart individual planning to determine needs and current digital capability to create personalized NetStart plans
- Access to content/services via the matrix digital cooperative, with membership options and the chance to build up and share in a digital dividend (a digital "divi")

The ONE-Manchester partnership will start to deliver this by implementing the first stage of establishing new digital action places (strengthening and building out from East Manchester) in the North Manchester, Central Manchester, and Tameside (Droylsden/Ashton Corridor) Regeneration Areas in 2007 to be followed by a second stage in the Wythenshawe, the Salford Urban Regeneration Company (URC) area, and North Trafford and Oldham Regeneration Areas during 2008.

## **5 BENEFITS FROM TRANSFORMATIONAL PRACTICE**

In an attempt to address the challenges presented by Manchester's industrial legacy and to ensure that economic growth can be sustained, ONE-Manchester is being developed on a multiagency basis to develop innovative eGovernment applications which will support

- service improvement through enhanced quality and delivery of services
- citizen engagement through the development of new models for service delivery and to engage citizens more effectively in strategic planning and consultation arrangements

- the development of new business models which will aid organizational transformation, including public-private partnerships and social economy enterprises

Social inclusion lies at the heart of this approach because large parts of the Manchester city-region are still characterized by poor quality environment and poor infrastructure, the economic hangover from industrial restructuring. People living here cannot reach their full potential as a result of this. Educational attainment and skill levels are low. Levels of poor health are among the highest in the UK and many residents live in areas where crime and anti-social behavior levels are significantly above the regional and national averages.

Worklessness rates are among the highest in the UK. Rates are more than 20 percent in Manchester's, some 60,000 people, and in the core urban population of more than 900,000, about 150,000 people are affected. Of the 58 priority wards being targeted by the new joint city strategy partnership initiative with the UK government's Department for Work and Pensions (DWP), 43 of them are in the urban core.

This is why the ONE-Manchester bid is concentrating on mainstreaming digital inclusion into the three priorities, or "spines", and linked into the local area agreement blocks.

- (1) *Reaching full potential in employment and education*: reconnecting people with opportunities to work, including for themselves, and to learn.
- (2) *Creating neighborhoods of choice*: creating improved and sustainable environments where people are, and feel, safe, where they have access to jobs, good schools, health services and amenities.
- (3) *Individual and collective self-esteem/mutual respect*: understanding what motivates people to behave in certain ways, what influences aspirations and attitudes, and how to best engage people in fulfilling their responsibilities toward achieving inclusion and cohesion.

Underpinning all of this is the belief that encouraging people back into work will have the biggest impact on quality of life and self esteem, including increasing collective self-esteem and mutual respect. Alongside this, we believe that health and environmental factors also need to be given a high priority in our commitment to transforming lives and communities. Sustainable communities require healthier, greener, cleaner, and safer lifestyles to be encouraged and nurtured.

To turn this around requires continued investment. As the recent review report of developments in the New East Manchester NEM-URC area highlighted,

*The NEM rock is halfway up the hill. There is much development planned. If support is not maintained it could just as easily roll back down the hill as reach the sunny uplands at the top. It is critical that all partners realise this and continue to support NEM.* (Professor Michael Parkinson, Liverpool JM University).

Based on the regeneration experience to date, the consultation and engagement undertaken with those who will be affected by the bid and the political commitment of the civic leadership, to deliver. ONE-Manchester believes that this approach can and will transform lives at three levels:



- First, mobilizing resources through the geographic focus of digital action places and dedicating these to deliver to the priority areas tailored to their specific needs.
- Second, by having content that is directly relevant to the needs of local people, and the service providers working to meet their needs, through the NetStart program.
- Third, by using the digital cooperative as a new model of mutual aid that will provide service users with the motivation to become more active participants in the process of transformation, supporting behavioural change with improved aspirations.

In addition, Manchester is in the first phase of the Building Schools for the Future (BSF) Program, while Tameside and Salford are starting programs in 2007, offering the opportunity with the Computers for Pupils scheme to create additional digital action places at each BSF school. The added value considerably enhances the potential for young people to fully achieve their potential and reduce the number of pupils not engaged in education, employment, or training. The additional presence of a PC in the homes of those young people eligible for equipment via Computers for Pupils creates more opportunity for entire families to access NetStart packs and engage in the digital cooperative. Enhanced opportunity via a combination of BSF and One Manchester is a significant element in the delivery of the “14-19 agenda” across the region.

Many people already know about lessons learned from innovative digital inclusion approaches in East Manchester. Initially ONE-Manchester will use that to roll out its proposal in the adjacent areas, with digital action places as the basis for digital inclusion in North and Central Manchester and West Tameside. The NetStart program will be used to generate greater awareness about ways of engaging people in these areas through digitally enabled social networking and about the benefits of joining the digital cooperative.

The next stage will be to develop operation of this digital inclusion model as a form of “franchise” arrangement within the Salford URC area and with pilot projects in North Trafford and Oldham. ONE-Manchester then intends to lead a roll-out program for digital action places across the city-region, the North West region, the three northern regions of England (known as the “Northern Way”), and nationally.

## **6 CONCLUSIONS**

The experience gained through the Eastserve project has been used by the partners involved in the ONE-Manchester initiative to reevaluate and refocus their work around the eGovernment and citizen engagement agendas. For Manchester City Council, this has meant a greater understanding of the need to be more proactive in stimulating demand for eGovernment service delivery. Side by side with organizational transformation internally, the City Council is now working hard to promote take up of e-services through awareness campaigns, improved access to training, and the direct involvement of citizens in producing content for on-line services.

Eastserve is considering new ways to achieve sustainability including developing a major part of its activities as a social economy enterprise which would develop a new cooperative model for service delivery with citizen stakeholders. All of this experience suggests that key players in eGovernment, such as local and regional government bodies,

need to take a more holistic approach to promoting and delivering greater access to, and take up of, information society technologies. Further work is now needed to identify and evaluate best practice, especially in terms of identifying what are the most effective ways of engaging citizen involvement and then sustaining it.

At the same time work is also needed on new delivery partnerships, looking not only at developing models of public-private partnerships but also at citizen partnerships and models of social economy enterprises. It is felt that there is significant scope to develop and test new organizational models which will play an important role in ensuring sustainability of these developments. One of the most important recommendations to come out of this work is the need for innovative approaches to tackling inequalities in the information society, the digital divide, for example by providing not only access to equipment, connectivity, and training, but also stimulating demand by developing good quality content and involving local citizens in generating that content.

City administrations also need to learn from these results and experiences, particularly in terms of involving citizens more effectively in the ongoing organizational transformation of public services. The Eastserve project has many implications for the way that public and community services are delivered, including eGovernment solutions, not only in local authorities but also in other areas (e.g., in East Manchester, the police and health services are also now implementing changes to the way they deliver services because of the experience of the Eastserve project).

This has led to policy recommendations being proposed by the Manchester Digital Development Agency (MDDA), which are being taken forward through the ONE-Manchester partnership at the local level, at the regional level through the North West eGovernment Group (NWeGG), at the national level as part of the UK government's Digital Challenge initiative, and through European networks such as Eurocities and Telecities.<sup>8</sup> In terms of defining new challenges for information society technologies and policies, the most important one is about how we engage with citizens to ensure that they can become active producers of online content and new e-services rather than passive consumers of what is there already (as outlined above).

It is felt that the transformation of urban living through the imaginative use of digital technologies can make a significant contribution to the EU's Lisbon objectives, especially as revised by the recent Report of the High Level Group,<sup>9</sup> in terms of jobs and growth. Cities act as motors of innovation and creativity for the economy and society as a whole and it is anticipated that this will increasingly be the source of future jobs and growth in the knowledge economy. At the same, time these technologies also provide opportunities to transform the lives of citizens, as highlighted in the EU's communication on the challenges to be addressed by a European Information Society Strategy up to 2010.<sup>10</sup> This is why the focus on tackling the digital divide and promoting digital inclusion is continuing to be seen as a priority, highlighting the need to ensure that citizens have the capacity, skills, and motivation to take advantage of these technologies.

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<sup>8</sup>See the Eurocities web site at [www.eurocities.org](http://www.eurocities.org).

<sup>9</sup> W. Kok (Chair), "Facing the Challenge—The Lisbon Strategy for Growth and Employment," Report from the High Level Group, Brussels, November 2004.

<sup>10</sup>European Commission, "Challenges for Europe's Information Society Beyond 2005," COM, 2004.

There are a number of specific lessons that be can learned from the Eastserve experience which it is hoped will be of use to similar projects being developed in other areas. First, the need to develop e-services that are based on the social, cultural, and economic needs of the neighborhoods. This requires a combination of detailed local research and real efforts to consult with and engage local people as an essential prerequisite for capturing user needs and involving users in the design and delivery of the new services. Second, the stakeholders in the project, especially the public sector, need to demonstrate a long term commitment to community engagement and capacity building and invest as much in the development of people's skills and confidence as in the technology being deployed. Third, the need to have an ongoing evaluation strategy that not only has the ability to identify weaknesses, and even failures, but also has the role of communicating these results directly into the strategic decision making process so that the project can adapt and evolve as quickly and effectively as possible, backed up by effective project management resources.

## **About the Author**

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