

Internet-based neighbourhood information systems and their consequences

This study looks at the emergence of internet-based information systems (IBNIS), examining a range of sites in detail. Based on interviews with those involved in the development of such sites in the UK and USA, it looks at how technology can be used to classify and sort people and places. The study was undertaken by Roger Burrows, Nick Ellison and Brian Woods of the Universities of York and Durham. They found:

- Internet-based neighbourhood information systems (IBNIS) are growing rapidly, allowing ever more detailed information about neighbourhoods to become publicly available. These systems have the potential to change fundamentally or to solidify the image of individual neighbourhoods. This has real consequences for people on the ground.
- Although IBNIS have been established for a wide range of reasons by a wide range of organisations, a review of the research literature on the topic reveals a concern that – taken as a whole – they could encourage ‘social sorting’.
- Recent research has shown that – despite the policy drive to encourage ‘mixed communities’ – processes of social differentiation and fragmentation are intensifying. Small areas are becoming both more and more similar within themselves and more and more differentiated one from another. IBNIS can have a strong influence on this process.
- Interviews with key providers and users of IBNIS found a high degree of awareness about the potential costs and benefits of the technology. Some were particularly concerned about the dangers of ‘misrepresenting’ places. However, the search for commercial advantage means that companies are unlikely to hold back as new information and new ways of representing place become available.
- With both the number and sophistication of IBNIS growing, the researchers conclude that it would be helpful for policy-makers and providers to discuss the potential positive and negative impacts of the technology at this early stage of development, and put in place a framework to minimise any damaging outcomes.



Background

Previous JRF research has demonstrated how important neighbourhood *images* can be. Such images influence both the lives of local residents and the attitudes and behaviours of others with the power and influence to invoke neighbourhood change. However, the sources of such neighbourhood imagery are fundamentally changing.

Not so long ago, images and perceptions of neighbourhoods and communities were largely generated from a range of primarily local sources. Local residents and those living nearby would hold key information about the history and folklore of particular places. Much of this was verbally communicated. Depictions of neighbourhoods were also the province of a range of local people – estate agents, journalists, social workers, for example – who filtered local knowledge for specific purposes and in specific ways, distilling and perpetuating particular neighbourhood images as they did so. The state and commerce also collected more systematic statistical and other data on neighbourhoods but, for the most part, this was not available to the general population.

However, the *technological* means by which neighbourhood images are now constructed, disseminated and consumed has undergone a revolution in recent years. With the emergence of numerous Internet-based neighbourhood information systems (IBNIS), any member of the public with access to the Internet can quickly and easily gain huge amounts of detailed information, often down to the level of individual postcodes.

This study took the form of a ‘scoping exercise’. It had two aims:

- first, to ‘map’ key IBNIS websites in the UK and USA, providing information about those sites – with some detailed case studies pulled out for deeper illustrative purposes; and
- second, to consider the potential implications of the emergence of IBNIS for contemporary perceptions of neighbourhood and ‘place’ in the light of the existing research literature on the topic and interviews with a range of key IBNIS stakeholders.

New forms of local knowledge

In the UK, commercial websites such as www.upmystreet.co.uk and www.homecheck.co.uk provide a plethora of statistical, geodemographic and environmental data down to the level of individual postcodes. National Statistics, through its site www.neighbourhood.statistics.gov.uk, provides detailed official data on a huge range of topics. In addition, www.upmystreet.co.uk provides a ‘conversations’ service where lay people ‘on the ground’ can comment on the social life of particular localities. Alongside these ‘data-driven’ sites, others – which might have a humorous intent (such as www.craptowns.co.uk and www.chavtowns.co.uk) – provide more informal (and usually negative) qualitative observations on places.

In the USA, websites like www.homestore.com and www.findyourspot.com allow individuals to rank the characteristics of their preferred type of neighbourhood in chosen areas and then provide information about those ZIP codes (postal areas) that most closely match their desired environment. Much of the information is derived from powerful statistical and geodemographic data developed by marketing companies.

The study found that IBNIS could most usefully be grouped into four categories:

- First, sites that are explicitly *commercial*. These include those offering neighbourhood information in order to attract sponsors and advertisers interested in place-based marketing services.
- Second, sites that have grown out of the activities of the *geodemographics industry*. Again these are commercial sites aimed primarily at the marketing industry, but which increasingly link with a range of other different types of (normally commercial) sites. Clearly geodemographic information of the sort provided by such sites is increasingly interesting to some consumers as much as it interests marketing organisations.
- Third, *sites aimed at the policy and research communities* at a national, regional and city level in order to provide data in support of a range of regeneration activities. Such information is also increasingly of interest to the public.
- Fourth, ‘*social software sites*’ run primarily by charities, political and/or community organisations using the

technology to provide resources for environmental and/or community development and campaigning purposes. These provide IBNIS that aim to contribute from the 'bottom up' towards resources for individuals, groups and communities of various sorts.

IBNIS as a 'social sorting' technology

Developments in IBNIS need to be set in the context of the increasingly important role that software plays in contemporary societies, particularly in urban environments. The study took seriously the need to analyse the relationship between 'physical' urban spaces and the digital technologies that are increasingly shaping understandings of these spaces. Conceptions of 'digital divides' are important here. This notion has proved to be fairly elastic, starting with the relatively simple idea that access to digital technologies is socially uneven – leading to a basic social divide between the 'information rich' and the 'information poor'.

Subsequent debates of the digital divide are arguably more important, especially as access to the Internet has increased markedly in recent years. These concentrate on the ways in which different social groups interpret and then act on Internet information – with certain groups able to make greater use of the information than others. More significantly still, debates examine how technologies like IBNIS are themselves beginning to divide and sort populations in a manner that enhances the socio-structural position of certain groups while disadvantaging others.

This latter dimension is crucial. Geodemographic sorting technologies deliberately segment populations, classifying them according to a range of commercial and governmental requirements. While such classification of people and places is hardly new in itself, sorting processes have been much enhanced by the new technologies and are increasingly widespread. How neighbourhoods are 'sorted' is merely one example of a process, or series of processes, that can sort people not merely according to basic data such as income, but according to individual tastes and consumer preferences, likely lifestyle habits and so on. Until recently, such sorting has been largely invisible to the public. With the emergence of IBNIS, though, there is the possibility that it will no longer just be commercial and policy interests that

are engaged in such activities. It is entirely plausible that some members of the public will be motivated to 'sort themselves out'.

The research question for the future is whether IBNIS will produce increasingly separated spaces where neighbourhoods – as defined by software programmes – will come to be more homogeneous within themselves and more diverse between themselves than would otherwise have been the case?

Stakeholders' perspectives

The interviews carried out for this study were exploratory. The main objective was to gain an understanding of how key stakeholders – website providers, geodemographic software developers and some 'service users' – perceive the current and future impact of IBNIS in the light of debates about 'digital divides', 'social sorting' and so on. To this end, the researchers interviewed 20 people in the UK and USA. Core issues raised included:

- The need to recognise that characterising and classifying neighbourhoods can be difficult and contentious.
- A concern with the accuracy of information and how best to represent it to 'lay' audiences.
- A desire (despite this recognition and concern) to obtain ever more detailed information about neighbourhoods. Information about schools' performance, school catchments and the social make-up of particular schools is of key significance here.
- A move towards increased interactive capability. US websites such as www.homestore.com and www.bestplaces.net already allow users to prioritise desired neighbourhood characteristics in order to facilitate neighbourhood search. UK websites do not, as yet, have this facility but are highly likely to introduce such provision in the near future.
- A recognition that increasingly sophisticated IBNIS will, in all likelihood, contribute to neighbourhood restructuring and 'social sorting', but that this is just one unavoidable consequence of the ongoing 'informatisation' of choice in everyday life.
- A generally optimistic view about future developments. This included a belief that IBNIS are here to stay and will increasingly become part of the mundane realities of everyday life; data about neighbourhoods and the

ability to search and sort through such data being viewed as just one small element in a more general social process of 'googleisation'.

Policy implications

There is nothing new in recognising that social divisions possess a strong spatial element. However, the emergence of IBNIS adds a powerful new means of 'segmenting' places. The implications of such processes are leading us towards a new terrain for policy debate – one that will necessitate dialogue between groups of people who have hitherto had little engagement one with another: the geodemographics industry; software designers; commercial and public sector IBNIS providers; those concerned with housing, neighbourhood and regional policy; those concerned with the design and roll out of e-government; and others.

The researchers conclude that, whilst no one would want to prevent the public availability of neighbourhood information, it would be as well to be alert to the implications that IBNIS might have for vulnerable neighbourhoods and populations. Certainly, at a very minimum, it might be sensible to ensure that:

- IBNIS provide mechanisms by which local people (and others) can challenge the manner in which their neighbourhood is characterised.
- IBNIS make their sources of local information explicit, in addition to making clear how the information was compiled.

About the project

In order to scope the significance of IBNIS the authors: examined in detail a representative range of IBNIS; read what has been written about them, their antecedents and the broader context of their emergence; interviewed a number of stakeholders involved in the development and use of such systems in both the UK and the USA; and considered what they had learnt from these three sources in the context of broader conceptual and policy interests in the differentiated social politics of neighbourhood life that is emerging in the early twenty-first century.

How to get further information

The full report, **Neighbourhoods on the net: The nature and impact of internet-based neighbourhood information systems** by Roger Burrows, Nick Ellison and Brian Woods, is published for the Foundation by The Policy Press (ISBN 1 86134 771 5, price £9.95).

Published by the Joseph Rowntree Foundation, The Homestead, 40 Water End, York YO30 6WP. This project is part of the JRF's research and development programme. These findings, however, are those of the authors and not necessarily those of the Foundation. ISSN 0958-3084

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