

network
citizens
power and
responsibility
at work

Richard Bradwell
Richard Reeves

metadata, citation and similar papers at core.ac.uk

DEMOS

First published in 2008

© Demos. Some rights reserved
*Magdalen House, 136 Tooley Street,
London, SE1 2TU, UK*

ISBN 978-1-906693-04-6

Copy edited by Susannah Wight, London

Series design by modernactivity

Typeset by Chat Noir Design, Charente

Printed by Lecturis, Eindhoven

Set in Gotham Rounded

and Baskerville 10

Cover paper: Arctic Volume

Text paper: Munken Premium White



Mixed Sources

Product group from well-managed
forests, controlled sources and
recycled wood or fiber

www.fsc.org Cert no. CU-COC-804101
© 1996 Forest Stewardship Council

network citizens

**Peter Bradwell
Richard Reeves**

Open access. Some rights reserved.

As the publisher of this work, Demos wants to encourage the circulation of our work as widely as possible while retaining the copyright. We therefore have an open access policy which enables anyone to access our content online without charge.

Anyone can download, save, perform or distribute this work in any format, including translation, without written permission. This is subject to the terms of the Demos licence found at the back of this publication. Its main conditions are:

- Demos and the author(s) are credited
- This summary and the address *www.demos.co.uk* are displayed
- The text is not altered and is used in full
- The work is not resold
- A copy of the work or link to its use online is sent to Demos

You are welcome to ask for permission to use this work for purposes other than those covered by the licence. Demos gratefully acknowledges the work of Creative Commons in inspiring our approach to copyright. To find out more go to *www.creativecommons.org*



Contents

Acknowledgements	6
Foreword	7
Overview	11
1 Technologies	17
2 Economies	25
3 Ecologies	33
4 Webs	41
5 Fault-lines	63
Conclusion: Citizens	71
Notes	77
References	81

Acknowledgements

We are extremely grateful first of all to the many participants who generously offered their time and ideas to the study research. Without them, the research could not have happened. In particular a big thank you to Zuzanna Pasierbinski-Wilson at Huddle, Sally Rice at Imaginatik, Emma Jones at Enterprise Nation, and Christophe Rufin at Orange. Tim Callington, from Edelman, offered help and support throughout.

Thank you also to all our Demos colleagues for their ideas and enthusiasm. Duncan O'Leary, involved early in the project, and Jack Stilgoe both gave wise and insightful guidance. Thanks also to Jamie Bartlett, Jonathan Birdwell and Charlie Edwards for their helpful thoughts and commentary on the work. We are also extremely grateful to the Demos interns who supported the project so intelligently: Tom Barker, Melodie Bouchaud, Mona Chalabi, Simon Hampson and Alex Tinsley. Deserving of special mention are Demos' Peter Harrington, copy editor Susannah Wight and typesetter John Unwin who guided the work through to publication so skilfully.

We are very grateful, finally, to Orange for supporting the work and making this research possible.

Errors and omissions remain our own.

Peter Bradwell
Richard Reeves
October 2008

Foreword

Old boys' associations, the local golf club, the local roundtable – the list of 'business networks' goes on and on. Individuals have been networking for as long as business existed, it oils the wheels of capitalism, it's how you get things done, often how you reach new customers and a way that ensures that work is a bit more interesting and even fun. So why do we therefore need another report examining the value of networking to organisations?

At Orange we are at the forefront of communications technology and helping to connect people. We have watched internet and communications technology super-charge the way people work. The recent 'noise' about social networking and particularly its online elements such as Facebook and Bebo and business equivalents including LinkedIn have created an extra layer to the potential opportunities for connection. The use of technology has added more richness and enabled networks to become truly global and fundamentally change business models.

But even as a technology provider we are not vain enough to believe that technology is the sole driver of the changes in networking or its value to individuals and organisations that have been identified. Technology is an enabler and has opened up networks so that work and social lives intersect in an indistinguishable way.

Orange has been working with Demos for a number of years exploring the way business is changing. We wanted to better understand the changes in the business world and gain the widest possible view from an independent body that does not compartmentalise work, but rather sees it as one facet of day-to-day life, which feeds to and from wider social, economic and regulatory trends.

In 2004 Demos and Orange published *Disorganisation: Why future organisations must loosen up*, which highlighted a growing

pressure inside organisations as employees want more human organisations with greater autonomy and flexibility but need to balance this tension between individual desires and organisations' need for tighter control. This desire for flexibility and freedom has been echoed in this new research, raising questions about the economic value and ownership of network contacts.

Our second report, *Working Progress: How to reconnect young people and organisations*, found that the desire for 'disorganisation' was stronger within younger people in the workforce. These changing values or social norms are, again, reflected in the latest report.

One of the key findings within this research is the tension that distinctions between purely personal and professional life are becoming increasingly blurred and that this is particularly the case with younger employees. The report identifies the rise of the 'network citizen' who relies more on their network for career opportunities than on their employers. This new dimension adds an extra level of complexity for businesses trying to recruit and retain the best employees while also managing their reputation and intellectual capital.

In fact, this report identifies both the ups and the downs of networking. It challenges the concept that networking will only engender creativity, innovation and freedom while reducing costs by highlighting a potential 'dark-side'. Networks blur the boundaries between formal hierarchies and informal structures in a company, and between our personal and professional lives. Networks can create a tension between employees and employers where traditional ideas of loyalty or ownership of ideas and contacts become difficult. Networking can be exclusive and the rise in online networking may exacerbate it. 'It's not what you know but who you know' may be an age-old adage: should business success today be based on contacts made through networking or purely on merit?

In the current economic climate, it might be easy to ignore networking as something to concentrate on when there's more time for lighter, less business-critical activities. The report points out that the value of networking within an economic downturn is

perhaps more important than ever and I believe it could, in fact, mean the difference between a business collapsing or capitalising on the tricky conditions. It is certainly something I will be trying to do more of. I see networking as a way to understand the challenges we are facing in creating a more flexible environment for business.

As you will see, this report probably raises more questions than it answers. However, the idea is to get people thinking and I believe it will succeed in doing exactly that. In fact to identify how networking can be used and measured more successfully across your business, I would suggest you take advantage of social networking's innate characteristics. Think in terms of collaboration and co-creation. Involve people across the organisation and make practical use of the technologies as part of the process.

Robert Ainger, Corporate Director, Orange Business

Overview

Human beings are social creatures. We spin intricate webs of relationships with friends, colleagues, neighbours and enemies. Each of us exists within a shifting social network. These are not, of course, startling or controversial statements. Aristotle pointed out the essentially social nature of people in his *Politics* more than two millennia ago. There is a tendency to discuss networks as if they are a new social phenomenon, but networks are as old and as troublesome as humanity itself.

Networks have become significantly more powerful, however, especially in the labour market. The loosening of organisational structures, the shift to a people-centred service economy and the explosion of new technologies has given a new electrical charge to networks:

Why the network society now? The answer is in the development of microelectronics and software-based communication technologies... We know that technology does not determine society. But we also know that without specific technologies some social structures could not develop.

Manuel Castells¹

The dynamics of the workplace are being reshaped by the ongoing relationship between networks – often informal, self-organising, horizontal, opaque – and the official structures of departments, line managers and appraisals. This is because people are able to work together more easily without the coordinating hand or disciplinary gaze of an organisation.

This pamphlet follows research designed to map the relationship between social networks and formal organisational structures. It was written to contribute to the way we understand how networks, collaboration and self-organisation are reshaping the way we live and work. It provides an anatomy of the

resulting network power, and an assessment of its implications for organisations and individuals. We argue that to manage these new currents of power and influence, we need to understand the role of *network citizens* and the responsibilities and norms of behaviour that should guide them.

In our research, we wanted to find out how organisations were responding to the increasing importance and visibility of social networks at work. We studied what, in practice, their effects are by focusing on six organisations, developing visualisations of their team networks and a series of interviews with participants. Our findings demonstrate that networks can be as powerful – indeed may be more powerful – than the formal structures of an organisation. The vitality of networks in enhancing innovation, productivity and democracy is graphically demonstrated. And the turbo-charging of networks by certain forms of technological advance – in particular the rise of online ‘social networking’ – is also clear. Networks power large professional service firms, technology start-ups and small trading businesses. The network ‘webs’ charted in Chapter 4 demonstrate the influence of networks within organisation boundaries, and in their relationships beyond their walls.

But they also reveal a blind spot. Networks and formal hierarchies coexist, but their differing logic creates a series of fault-lines. Networks have a darker side that can make power, influence and dynamics *less* visible. They lead to difficult questions of influence, innovation, meritocracy and, fundamentally, loyalty, and the relationship between individuals and organisations.

The answer is not to close down staff access to social network platforms, nor is it investing blindly in collaborative platforms. Rather, we argue that we need to understand how, once we accept the implications of social networks, we can manage the new challenges and trade-offs. Understanding and closing these fault-lines is now critical to business success. But it is also vital for realising a vision of meritocratic, democratic work. And our key finding is that without enough attention, these challenges jeopardise the very gains we presume networks

can deliver. The interaction of webs of human relationships and organisational structures – what we call network ‘ecologies’ – can have profoundly progressive implications; but these cannot be simply assumed.

We call Skype our virtual water-cooler.

Emma Jones, founder of Enterprise Nation

Of course some companies are not organisations at all, but more networks bound together by Skype, Facebook, loyalty, mutual interest and friendship.

Enterprise Nation – one of the companies highlighted in this study – is a business that runs an advice and community website for the burgeoning home-working community.² It practises what it preaches: it has five employees, all home workers connected and networked together through technology and monthly staff meet-ups. Their story can tell us much about how organisations use and respond to networks, and vice versa. As a business made up primarily of Emma Jones and five employees spread around the country, the technological tools for networking play a huge role. It has become central to daily contact and interaction. It helps maintain a sense of togetherness in lieu of office-based interaction. Every morning the members of the team log in and share what Emma calls ‘water cooler’ chatting, before settling in for business. Technology means that they can generate that sense of shared work, to an extent, from a distance.

But the dilemmas faced by Emma Jones, founder and editor of Enterprise Nation, resonate across all of our case studies. Networks, and the supporting technologies, promise to offer new ways of working that facilitate new business models and help her retain a sense of autonomy and entrepreneurship. But that very same logic poses some serious questions for her and her staff: of the right mix of online and offline networking; of the tension between managerialism and organisational ‘looseness’; of the blurring boundaries between professional and personal. And most crucially, perhaps, the sense of loyalty, commitment and responsibility between employer and employee.

A central concern for many organisations today is how to respond to the opportunities and challenges that new social network technologies offer. Their employees use them – as the case studies in this report vividly demonstrate. Some of their competitors are embracing and investing in them. How to adapt? Should they ban Facebook? Or open their own Facebook group? Start their own Twitter feed? Should they invest in new technologies? And if so, which ones? What is the business impact of these new forms of connective social tissue?

The new online applications have generated plenty of media attention, not least because of the vertiginous growth in their user numbers: there are now 12.6 million people in the UK using Facebook, for example.³ According to Hitwise Intelligence, it was behind only Google as the second most visited website in the UK in September 2008.⁴ The importance of these technologies lies less in their technical attributes than in the way they deepen and extend human networks. In the report we focus on how the principles of social networks in the broadest sense intersect with the interests and organising principles of traditionally structured organisations.

The rise of network power is not then in doubt. But with power comes responsibility. Like all human institutions, networks can work for good or ill. While the positive contribution of networks to business and social life is obvious, and well documented, there can be a ‘dark side’ to networks, too. From an organisational perspective, networks can be harnessed to reduce barriers to information, spark innovation and nurture talent. But as networks become more important, the loyalty of the individual may be as much to the network as to the firm, which poses sharp challenges if the interests of the network and the firm diverge. We are used to asking how organisations can use networks, but we should not be blind to the fact that *networks use organisations*, too.

Networks can build meritocracy, openness and democracy – but then can also exclude and discriminate. They can help to diffuse power away from hierarchical structures – but they can hoard power for themselves, too. In this report we examine some of these fault-lines within network ecologies. We consider how a

‘flattening world’ is empowering individuals, and while acknowledging some very real benefits of the flattened world, ask where might the new contours of power and inequality lie that will shape the network world?

A richer understanding of the growing power of networks and their inherent tensions should force organisations and individuals to consider a range of potential implications. Firms need a better grasp of the nature and reach of the networks being cultivated within and between their organisational boundaries. Without a better eye on these undercurrents, the hidden dynamics can cause sclerosis, denying the very gains in innovation, efficiency and workplace values they were hoping an understanding of social networks would bring about.

Individuals, especially those who occupy a powerful position within increasingly powerful networks – those we dub in this report ‘network capitalists’ – also need to examine their own role and responsibilities. Since networks can act for good or ill, incubating the talents and ideas of the many, or promoting the interests of the few, the need for a new set of responsibilities is growing. If we are network members, we must be network citizens, too.

1 Technologies

In most organisations, people's relationships with each other are defined bureaucratically. The lines that join members together are formal – the manager, the support staff, the sales team. People's functions and roles are defined in the same way. The way the organisation is intended to function can be read from how these roles are defined. A network on the other hand is, at its most simple, 'a set of items... with connections between them'.⁵ Networks rely on links, social ties or interdependencies, as much their constituent parts. Relationships define networks.

Organisational structures and 'networks' are not distinct. The difference is that organisations tend to focus on one kind of relationship – the usually hierarchical bureaucratic structure – to the exclusion of others. But even in the most rigid of hierarchies, undercurrents of less formalised relationships will exist. In the most formal of contractual relationships between companies, there will be connections and relationships that cut across, or even undermine, the legal bonds. Networks are eternal facts of our social existence. Clocking on at work does not make them go away. We can't escape them and we have never been able to.

So why is there a renewed interest in them? The easy answer is technology, which has made it easier and easier to form connections, emboldening these network relationships and making them more visible to the outside world. Cheaper, faster and more widespread access to the internet has played a key role, meaning more people have access to the tools that facilitate social networking.

Still, these technologies are most often thought of as *social* – more pleasure than business. When discussed in the context of work, they have tended to be regarded as a drain on productivity, a leaking of people's social lives into office hours. Recently, however, we are seeing more attention focused on the power of

social networking platforms to help businesses. The organisational benefits of harnessing and capitalising them are becoming clear. According to their CEO John Chambers, Cisco saved \$150 million through collaborative tools that harnessed networks of ideas: 'For the first time collaborative IT will be so intertwined with the business strategy you won't know the difference between the two.'⁶

In the following two chapters we will set out why it is that these dynamics of social networking have come to feature so prominently in organisational thinking. In this chapter, we look at why technology is part of the answer. We will argue that we are in a new phase of our relationship to network technologies. We have moved past the stage of blind enthusiasm towards the potential of technology. As they have become embedded in everyday life, we are now working through what their tangible effects are. And we are finding that, in the context of work, the distinction between social relationships and professional life is becoming hard to maintain.

Network technologies

Technological access is still far from universal – there are still significant social, generational and regional inequalities. But great strides have been made in connectivity. Around 65 per cent of UK households had access to the internet in 2008, an increase of 1.2 million households (8 per cent) since 2007.⁷ Digital inclusion strategies have become focused more broadly on how technology can help tackle complex social problems, rather than simply on spreading access to the internet.⁸

Since the invention of the telephone, people have been able to make new connections, professional and social, that transcend borders, boundaries and traditional hierarchies. As access and technological capabilities have grown, there have been great innovations in networking platforms. MySpace may have been the first to gain mass attention, but it is the tip of an iceberg. It has been complemented or surpassed by a new suite of platforms. Information and communication technologies have allowed networks to break out of an imposed local context, to

exist at different levels, for different purposes. More recently, online social networks have made it easier than ever to create, maintain and develop links with people and organisations. Those connections might be accidental, or they may be purposeful, gravitating around hubs of common interests, ideas or values.

Some social network tools focus on *friendships* and on the social connection between people and groups. These are tools that allow users to create a profile of themselves and ‘friend’ (connect with) other users. Examples include Facebook, MySpace or hi5. Users grant access to their profile to other people through ‘friending’. Profiles allow people to share photographs, comments and news of events. Users can also create groups to signal through association their values or ideals.

Other sites focus on specific forms of expression. For example, Twitter is a social network tool based around ‘microblogging’, and features small dispatches that are akin to short ‘status’ updates – where someone is, something they’ve seen, a brief thought or an exclamation of delight or despair. Sites like Flickr focus on photos, videos or music. These have been supplemented by platforms that facilitate the exchange of ideas and that help collaborative working. They mix ‘wiki’-like tools with characteristics of social networks, such as profiles and ‘tagging’, allowing people to share documents, develop ideas together, and manage the sharing of knowledge.

One of the most important features of social network technologies is that they allow more people to create, map, visualise and define ideas, connections and relationships. That means a number of questions are answered in a more social way: who I am; what I’m doing, or thinking; what is happening and what is important; or what something means. Not only can people be a part of making these connections, but they can be a part of defining them as well.

The rise of network capital

There are two stories of technology that help us understand how these technologies are relevant to organisations, and why they demand some radical responses from them. The first concerns

the explosion of online social networking platforms we just mentioned. The second involves the responses in the culture industry to the consequences of this success. They are both implications of how technology has changed how people connect with each other, share ideas and knowledge, and collaborate.

Online networking platforms such as Facebook and MySpace have seen extraordinary success and popularity. Since opening up to the general public in February 2007, Facebook has risen to the fifth most popular website in the world.⁹ Its growth has remained high in the year from September 2007 to August 2008, at 88 per cent.¹⁰ As society learns to make sense of such platforms and use them to its advantage, two striking long-term lessons of the social networking phenomenon are apparent.

It's the relationship, not the connection

The way people use social networking sites is evolving from enthusiasm for the technology into a focus on the value of networking. Danah Boyd, an academic who focuses on social networks online, complained on her blog in late 2007 that she was losing control of her Facebook profile. The difficulty of managing *context* – which ‘friends’ you wanted to be part of which social activity – was making it difficult to maintain meaningful relationships on that platform.¹¹

Some may still play the game of grasping for as high a number of connections as possible. But most are recognising that *context* and *scale* are far more significant in the longer term. It is the *nature* of the relationship, rather than the *number* of relationships, that matters. As our usage of such technologies becomes mundane, and as they encroach on organisations, we will see more emphasis on the quality than on the quantity of connections.

Identity and network presence

Digital identity is becoming more and more important as our online and offline lives mix. Indeed, if we take a broad definition of digital identity as our ‘footprint’ of personal information and

the way that it informs decisions about us, then digital and offline identities are hardly separable at all. Personal information about us mediates many of the important decisions that get taken about us, either by individuals or by organisations.

We are waking up to the recognition that the things that we say about ourselves, and that are said about us, online, have serious ramifications. That creates a key tension between the control we have over our identity and reputation, and the ability of other people to take decisions about us out of our hands.¹²

People flocked to social networking sites initially because of curiosity, but more recently because of the power these sites offer over the way they are seen. We are driven by our deep-seated desire to share and socialise. The sites give us a new sense of control over how others see us. But, as organisations have noticed as much as people, elusive, free-flowing opinions and fickle associations make reputation hard to manage.¹³ Businesses have responded as they noticed the heavy influence these networks can hold over people's opinions. For example, brands have begun to use Twitter to improve their contact with customers, monitor commentary about them, and manage people's impressions.¹⁴

In a world of network working, understanding the consequences of who will see what about you, when, is increasingly vital. We should not be surprised. Our online presence, defined as much by others as ourselves, is coming to supersede our CVs, over which we have total control. Increasingly, our reputation really does precede us. Being part of an organisation is still hugely important for our sense of identity and how others judge our value, status and potential. But the role of *network* capital is increasing, and the influence of personal reputation, history and network presence will be vital. This is giving people more opportunities beyond organisations. But it also opens new challenges for how we manage our network reputation.

Network piracy

For years the music industry has struggled to adapt to the proliferation of online file-sharing platforms. With the

emergence of easy-to-use programmes, it is now simple to share music, with bandwidth, connection costs and lingering doubts about illegality as the only obstacles. Through early network platforms like Napster, and later innovative tools like BitTorrent, individuals could connect with millions of others and open up access to their libraries of content. The problem, of course, was that this directly undermined the business models of music distributors and rights holders.

Aside from the rights and wrongs of this new form of music distribution, the lesson for our purposes stems from the confrontation between peer-to-peer networks and traditional models of some cultural industries. The response has seen organisations trying to subsume the logic of networks into older models of business. This has not helped the businesses themselves, or those listening to or making music. Music listeners have been quick to find easier ways to spread music than through slow-to-emerge official channels. Some music makers have often found better ways of distributing it.

But a reluctance to let go of strict control over the distribution of information has meant a sluggishness in designing easy to use, customer-friendly services. That has seen the music industry often pitch itself against its own customers, rather than work with the grain of how users found, shared and listened to music. The result is that the networks have continued to do their work outside ‘official’ platforms. Only recently have there been really innovative models that build themselves around the logic of social networking – often based around monetising the use of sites through advertising, a model used by ‘social music’ site Last.fm, for example.

An important argument in this pamphlet is that we should pay attention not only to how organisations can respond to social networks, but also to the embedded logic of networked working. This demands that we let new organisational forms emerge that work with the grain of networked work, production and distribution.

The success of these online platforms tells us about the way technology is helping shape and encourage new ways of working, associating and living together. They promote new

kinds of connection and exchange. They help encourage more collaboration, and open up new spaces for innovation. They help make our sense of personal identity and our relationship to others more pronounced. The technologies that help this happen have become embedded in everyday life. As they have done so, they may have become technically boring, but they have as a result become, in Clay Shirky's terminology, 'socially interesting'.¹⁵ And in a talk at Demos in July this year, Shirky argued that 'whenever you change the way groups get together or get things done, you change society'.¹⁶ As this has happened, it has exacerbated the need to look past the question of how networks interrupt or contradict an organisation's way of working. We should ask what the logic of networks, as it unfolds in everyday life, means for how an organisation can and should work.

2 Economies

Mark: Haven't you got work in the morning?

*Jeremy: Oh yeah, that's really going to break his balls if I roll in an hour late. Mark, this is Russel Orgazoid. He's a creative, I'm a creative. We don't make steam engines out of pig iron in this country anymore yeah... we hang out, we f*ck around on the PlayStation and we eat Ben & Jerry's. That's how everyone makes their money now, yeah?*

Peep Show¹⁷

Technology is only part of the answer to why it is that networks have remained in such sharp focus, and have occupied thinking around work and businesses. The technologies do not exist in a vacuum. They have emerged at a time in which old assumptions about work, the economy and organisations are in flux. In this chapter we set out two of the key changes to the economy and labour market which, alongside the technologies, have put social networks at the heart of organisational thinking. They have done so because they are changes that put collaboration and interdependence at the heart of business practice.

The last two decades have seen a shift away towards service and knowledge-based work. Knowledge-based services grew 177 per cent between 1995 and 2005, compared with 52 per cent for non-knowledge-based services. Between 1996 and 2006 employment in knowledge-intensive services in the UK increased from 37 per cent of all jobs to 43 per cent. At the same time, high-tech manufacturing declined from 443,300 jobs in 1996 to 288,000 in 2006.¹⁸ It is a phenomenon visible in many developed countries.

This distinction between manufacturing and knowledge is, of course, not really a *distinction*. Manufacturing industries are based around a range of service and knowledge-intensive

endeavours. As a report from the Department for Business, Enterprise & Regulatory Reform and the Department for Innovation, Universities & Skills has argued:

*The Government is clear that the UK's future lies in a mixed and balanced economy, where manufacturing activities complement services to deliver the widest possible range of economic benefits across all regions, and create skilled jobs that span the entire value chain, from research through to fabrication, branding and sales.*¹⁹

The report goes on to argue that ‘many firms have developed in new or unfamiliar sectors, such as silicon design, Bluetooth technology, in-flight refuelling systems, fuel cells and plastic electronics, or they are developing frontier technologies, such as information and communications, biotechnology and nanotechnology’.²⁰

These changes are part of a fiercely competitive international environment, marked by an internationalised division of labour. As economies have become intertwined and trade has become freer, so specialisation and the placement of jobs has seen more developed countries taking on higher skilled jobs. More manually intensive employment has moved out, and in its place we have the processing of services and ‘knowledge’ industries, from banking to marketing. As a consequence, for example, in the EU²⁷ 37 per cent of the employed population work in high-skilled white collar jobs, and in nine of the member states the figure is over 40 per cent.²¹

As this specialisation has increased, so has our dependence on trade become more embedded. That has played a significant role in binding us together in complex interdependencies. As Katerina Rudiger has argued in a report for the Work Foundation, ‘this shift to “intangibles” is underpinned by modern economic growth theory, which acknowledges the vital role that technological progress and knowledge play in generating long-term growth. In other words, human capital contributes increasingly to corporate and national performance.’²²

For those working in the industries that constitute these ‘knowledge’ sectors, labour practices look different from those in

traditional forms of manufacturing, for example. Part of this is about the intangibility of some sectors of this knowledge and service-based economy; creative work in particular is much harder to oversee and direct from the top down.²³ These altering expectations of work centre around the desire for more values-based employment, for which the money is not the sole incentive. In addition, employees are looking for values that match their own, and work that fits with their life rather than something that simply pays for it to happen (see box 1).

There are real changes in expectations and practices from employees. There is some evidence that individuals are demanding work with a clearer purpose and meaning, and choosing employers with a higher moral standard.²⁴ These so-called 'ethical employees' also place a high emphasis on communities in the workplace. Offices have in any case also become more important social communities, with increasing numbers of workers finding friends, partners and spouses through work.²⁵ These social ties are strong predictors of wellbeing at work; to that extent, networked firms are happy firms, too.

At the same time, there has been a growing acknowledgement of the importance of cooperation in modern post-Fordist 'learning economies'.²⁶ This extends to the relationship between businesses, too, as firms become entwined, and between businesses and consumers. As Charles Leadbeater argues in *We-Think*: 'Open and collaborative models of organisation will increasingly trump closed and hierarchical models as a way to promote innovation, organise work, and engage consumers.'²⁷

Box 1

Demos on the future of work

The changing context of work is an area of long-standing interest to Demos. In Disorganisation,²⁸ Paul Miller and Paul Skidmore explored how the pressures from employees for more human values at work was forcing organisations to 'loosen up', giving them space to pursue interests and collaborations and working practices that fit those values. It

was an early intervention into the emerging tension explored further in this pamphlet. Similarly, in the Pro-Am Revolution²⁹ Charles Leadbeater and Paul Miller found a new ethic of commitment to what might previously have been thought of as hobbies. So in a number of sectors, employees have and want more control over their work. More recently, in the pamphlet Working Progress³⁰ Duncan O'Leary and Sarah Gillinson painted this in generational terms. In Recruitment 2020³¹ Duncan O'Leary and Niamh Gallagher found that the 'terms and conditions of work, beyond pay – company ethos, the psychological contract, corporate social responsibility (CSR) and ethics – are increasingly important to candidates seeking work'. In addition to remuneration, they found that people are often looking for, and organisations often have to offer, something else beyond remuneration to attract the best talent. They need to offer values that match those of potential employees. In The Everyday Democracy Index³² Paul Skidmore and Kirsten Bound looked at ways to measure the degree of empowerment people feel in relation to working life, arguing that 'just as gaps can emerge between people's formal political rights and the culture that surrounds them, so they can emerge between formal workplace rights and structures and workers' actual experience of them'.

The impact of collaboration and changing workplaces

The fear that networking platforms pose a threat in the workplace has quickly given way to a realisation that the boundaries between work and personal interaction are blurring, and there has been a move away from a presumption that there is a clear boundary around the use of social networking tools at work. For example, a survey by the Creative Group of marketing and advertising executives in the US found that 57 per cent believe it is permissible for employees to browse non-work-related websites during business hours.³³

Businesses have begun to embrace the way social networks work, and are looking towards tools that take advantage of the connections they facilitate. But this betrays the deeper

realisation. Social networks and dynamics can be as important as, and often are *more* important than, formal hierarchy and structure, in determining how information flows and innovation emerges in an organisation. Consultancy firm McKinsey has studied the importance of social or employee networks for businesses. They found in their research that ‘the formal structures of companies... don’t explain how most of their real day-to-day work gets done’. They go on to argue that to capture that value, these network relationships need to be formalised in ways that do not interrupt the looseness from which their value emerges.³⁴

The result is that this network logic will have an increasing importance for the labour market and for organisations. In their work on the future of work, PricewaterhouseCoopers find that there will be a ‘rise in importance of social capital and relationships as the drivers of business success’.³⁵ That means a world where the management of the relationship between organisation and individuals will become key.

Transaction costs

The coincidence of technological, social and labour market change is significant for the way we think of organisations because it changes the costs of their operation. In economic terminology, it changes their transaction costs.

Organisations exist to solve a problem: market exchange comes with huge transaction costs – a lack of information, perpetual bargaining, and a lack of organisational memory. These add to how much it costs to run a business. In the 1930s, Nobel prize-winning economist Ronald Coase built a theory of organisations, seeing them replace these repeat transactions (and their costs) with direction and coordination to make a firm more productive than a group of contractors and sub contractors.³⁶ In this sense, markets and firms are ‘alternative modes for organising the very same transactions’.³⁷ So firms exist, in this model, to circumvent some of the costs that would accrue from purely decentralised, market-based interactions.

However, organisations bring their own costs –

bureaucracy, administration, communication, monitoring, free-riding. The challenge for organisations, therefore, is always to reduce the costs of organisation while maintaining its benefits.

Coase offers a framework for understanding why firms exist to organise networks of workers. But the new factors outlined above influence the options available to organisations and the success or otherwise of the way that they adapt. The different patterns of working and technologically enabled networking change the costs of organising and collaborating. As a consequence, as these changes impacted on organisations, new forms emerged. They were born at the intersection of the technological changes and the growing knowledge sectors of the economy.

From the 1980s innovations in computing and technology were driven by the obsessive collaborations of technology enthusiasts. This initially seemed to run against the grain of the business mindset. But slowly businesses emerged that thrived off this creativity – Netscape released its code and from the collaborative fervour that ensued the Mozilla Foundation emerged, whose success is built on collaborations across users, developers and designers. Many of Google's most successful products, such as Gmail, are the offspring of its employees who are given time and resources to develop personal projects in company time.

Infrastructure and economic and social practices have intertwined our fortunes and futures in unprecedented ways. The recent economic downturn is a fine example. Complex financial relationships make cause and effect impossible to unravel. But it is clear that sub-prime mortgage crisis in the US, banking bail-out in Europe and the longer-term economic fortunes of people across the world are deeply enjoined. As individuals, decisions we make as consumers or citizens can reverberate through networks of economic or social interdependence across the world. Our decisions to buy different brands of coffee can resonate and affect living standards in coffee-growing areas across the world.

In understanding networks and organisations, we have to understand how the prevalence of network logic changes the

relationship between employee and employer, and individual and organisation. Just as our decisions as citizens and consumers affect others across the world, our participation in networks at work can have ripple effects across our co-workers, employers, employees and clients. That is placing a higher premium on our understanding of the ecologies of networks, and the consequent personal and organisational responsibilities we have within them.

3 Ecologies

The work organisations do is changing; they are working in a new context and the people who work for organisations have different priorities. Networks challenge more formalised hierarchies and centres of power and control, which have traditionally underpinned organisational structures. In doing so they may open up new opportunities for innovation, as well as for individuals' freedom and fulfillment. So networks and the looser, more dynamic relationships they embody seem to hold a democratising promise: the bypassing of entrenched relationships and ideals that have become solidified into hierarchies and organisational structures – while also holding the potential to become an 'enterprise tool' for organisations. In this chapter we outline what social network analysis is, what the 'ecologies' of networks are, and why we should care about them.

Because they are informal and agile, networks allow people to take advantage of new opportunities, and free people from the constraints of hierarchical oversight. New technologies have helped to facilitate new kinds of exchange. Networks, as an organising force, have always existed. But technologies have made it easier for people to connect and collaborate. This has, as a result, made it theoretically easier for individuals to circumvent organisations that may previously have acted as the gatekeepers to information, people or resources. Thomas Friedman lists ten forces that, in his eyes, have 'flattened' the world. They all broadly relate to the establishment of international communications networks, and the exchanges and connections this has facilitated. As these trends have converged:

... people the world over started... realising they had more power than ever to go global as individuals, they needed to think of themselves competing

*against other individuals all over the planet, and they had more opportunities to work with those other individuals, not just compete with them.*³⁸

But to understand how these connections work, we have to examine more than the possibility of connection and collaboration. The academic field of economic sociology, developed early through Durkheim and Weber, looked to the social relationships and context that inform and shape the economic circumstance.³⁹ It is an area of work which lives on today. One manifestation of this can perhaps be seen in work that interrupts presumptions that economic factors alone can explain our behaviour. As policy decisions becomes increasingly intertwined with public behaviour, we need to acknowledge that ‘social conditions, not just economic self-interest, drive decision making’.⁴⁰

There are continuities with the work of ‘social network analysis’. Academic Will Davies describes some key orientations of this approach:

*An individual may be quite close to the bottom of a formal hierarchy, but occupy a position close to the centre of several informal sets of relationships, granting him a degree of centrality that reveals his actual power. To put it another way, if lots of people need to go through me to get something done, that indicates my power and influence in some way.*⁴¹

The key is that social network analysis tries to move beyond the bureaucratic sclerosis of seeing, narrowly, only the formal connections in a given organisation. The ecologies of networks involve complex relationships, and social network analysis is one way of mapping them (see box 2).

Box 2

Network relationships

Social network analysis can help unveil the connections between members of a social network. In doing so, it helps reveal the dynamics that, as we have argued, impact heavily on how organisations’ work gets done. The ecologies of social

networks are constituted by a range of different forms of relationship, from strong friendships to casual acquaintance through to functional business contact. These are some of the key descriptors of these relationships that social network analysis relies on:

- *Betweenness: Betweenness measures the extent to which a 'node' – a person or organisation for example – connects people who would otherwise not be connected. Betweenness is perhaps particularly significant in relationships between firms, as it is a relationship that facilitates access to a new set of relationships. It can therefore be a source of significant power and value. It can mean people are regarded as a unique 'in' to a set of desirable relationships.*
- *Degree: This simply measures the number of connections a member of a network has. In itself, this measure leaves out elements such as betweenness, as it does not take into account how much the network is dependent on the connections that this degree of centrality facilitates – in other words, it does not take into account the extent to which that node bridges people who would otherwise not be connected.*
- *Reciprocity: Is the tie shared? Reciprocity reveals whether both sides experience the tie in the same way, or whether the tie is actually reciprocal. For example, in our work, we asked if participants had colleagues' phone numbers. Where only one answered positively, we could define the relationship as one-way and not reciprocal.*
- *Strength: 'Dunbar's number' is a law that suggests the maximum size of social network is 150, due to the constraints of our capacity for communication. But strength of tie is not always a benefit for the dynamic of a social network. Mark Granovetter famously developed the argument that, in fact, weak ties can be more beneficial to a group dynamic than strong ties.⁴² First, the level of strength necessary for the flow of connections and knowledge can also be low. But more importantly, very strong ties can work against the aim of innovative idea exchange as the members develop such intricate knowledge of each others' beliefs, orientation and ideas.*

Not all networkers are born equal

Thomas Friedman himself has conceded that inequalities can get in the way of the 'flattening' process: 'I know that the world is not flat... There are hundreds of millions of people on this planet who have been left behind by this flattening process...'⁴³

Excitement over the networked world can be overzealous. The possibilities are obvious, but they can be overstated.

Technology has broken down hierarchies and organisational boundaries. Twenty years ago you needed an appointment to meet a CEO. Now they are just one email away. As well as this flattening of connection, technology *is* enabling much greater self-organisation. *We-Think* by Charles Leadbeater details many of the new potential opportunities for collaboration, for example.

But we have entered a new phase in our relationship to technology. It has become socially interesting because our curiosity has moved from the technology itself – the sheer fascination with the gadgets – to their application. We are still making sense of our relationship with new communication technologies. We are struggling to construct new norms for behaviour to replace the old hierarchies. It is not simply a case of networks flattening organisations. New channels open up but others are closed. So while our CEOs are in theory an email away, they are in practice firewalled as much as they ever were, with assistants filtering their communications to prevent them drowning in email.

Inequalities

The story of empowerment is selective. The opportunities afforded by new technologies are not evenly distributed. Following the early excitement about the utopian potential of technology, the focus on the promise has given way to an interest in the practical *implications* of the use of technology. Gone is the assumption that technology in itself will eradicate poverty, democratise the media or drive the economy towards meritocracy. The network infrastructures – the new communications networks, for example, and the cheaper, easier access to them – are facilitating new relationships and

connections between people that circumnavigate old hierarchies. But it is often the complex associations and effects of *networks* that hinder people's life chances, rather than just being the fault of lumbering or regressive organisations. A move towards empowering the logic of networks risks exacerbating some of the very problems it promises to resolve.

This has not gone unnoticed. We have already mentioned the Digital Inclusion team. In *Video Republic*, Demos argues that cheaper technologies and access to broadband technologies has seen the emergence of a new and emerging public realm. This 'Video Republic' has become a space of cultural exchange, giving those who populate it a new space for debate, citizenship and, potentially, social change.⁴⁴ But central to any serious understanding of this new space is a recognition that this has ushered in a new set of inequalities, based around people's ability to operate in these networked spaces.

Networks and influence

*Formal rights and powers do not always map neatly onto people's actual, day-to-day experience and perception of empowerment. Just as gaps can emerge between people's formal political rights and the culture that surrounds them, so they can emerge between formal workplace rights and structures and workers' actual experience of them.*⁴⁵

Some people are more likely to sit in positions of influence than others, and be able to use their network capital. That has brought new, emerging power dynamics and inequalities. In the case of the former, within networks themselves there will be currents of influence and irresponsibility or malice, and some will be more equipped to navigate these currents than others. There are also disparities in the skills and network capital needed to function successfully in a network world – whether that is as part of an organisation, as a freelance or as an entrepreneur.

The notion of social capital has long been used to describe the influences beyond money that help determine people's life chances. The exacerbation of the trends that have boosted the

profile of networking and its implications for business mean that we have to turn our attention to these dynamics, and the resulting influences and inequalities. It is the validation of employees networking that pushes the tensions this pamphlet is focused on. We are creating a loose world of networked connections. The inhabitants of this world are network citizens. Through the way they behave, they create ‘network capital’.

As we mention in box 1, in *The Everyday Democracy Index*, Paul Skidmore and Kirsten Bound examine the factors that constitute ‘empowerment at work’ – and one of them is workplace democracy. The power that we have over our working lives – where we spend on average 38.6 hours a week⁴⁶ – is significant to our quality of life and well being. Further, as a place where we spend so much of our time, our ability to influence decisions and behaviour that affect us there is crucial. As the Work Foundation argues in a report on the significance of job quality, ‘if we care about the capabilities of individuals to choose a life that they value then we should care about job quality’.⁴⁷ This network capital will be an increasing influence on the quality of our working lives. As we shall argue below, this network capital is ‘sticky’ – hard to transfer, and therefore incredibly valuable. And its leverage is such that it plays a vital role in determining the experience of work, and the way networks are impacting on organisations, as we shall see in the following chapters.

Our research

We undertook in-depth analysis of six organisations’ approach to networking, exploring the approach to internal and external dynamics. We were interested in how they felt networking was relevant to their business; how they were responding to the opportunities and challenges that networking presented them; the tools that they used; the tensions they saw; and the way employees use networking tools.

The case studies are based on a series of telephone interviews with staff, and network ‘maps’ drawn from surveys sent to the teams involved. The latter provide visualisations of

the relationships within the teams taking part. Rather than focusing exclusively on work relationships, we developed questions that would open up deeper connections and evoke participants' understanding of the nature of the boundaries between their work, personal life and career.

4 Webs

It was an emerging market at the time. We were 1/4 of the size. I saw that web 2.0 was permeating the business world and changing how business worked.

Interviewee, Imaginatik

Talking to the employees within organisations for our case studies, it quickly becomes apparent that social networks have become impossible for organisations to ignore. Different organisations, big, small, at the leading edge of network innovation or responding to external changes, are making sense of social networks in different ways. Across all of our case studies, organisations are paying serious attention to how to capitalise not only on the technologies of networking, but also on the collaborative ethic that networks demand. But organisations are also aware of the way that employees experience the freedoms of network working, and are wrestling with the consequences. The most innovative responses to this challenge are those that go with the grain of networks.

In this chapter we outline the main findings from our network mapping and interviews, and draw lessons from our qualitative work and analysis. Network logic has infiltrated working culture, and employers are increasingly aware of the inevitable blurring boundaries between work and social interaction. For employees, this blurring means they increasingly see their social networks bound up with the success of their careers, present and future, inside organisations and outside.

Through the maps we are able to display how those working within the organisations see their working relationships to others. We designed our network maps to visualise the relationships between those working in the case study organisations, focusing on *internal* networks, and ostensibly on

the dynamics of these internal connections. At the most basic level, this allows us to see the extent to which employees work closely with each other.

Box 3

Methodology

Our six case study organisations are:

- *Enterprise Nation*
- *a small plastics trading firm*
- *Imaginatik*
- *Huddle*
- *Orange*
- *a large professional services firm.*

Two of the organisations requested anonymity, and will be referred to as the large professional services firm and a small plastics trading firm. The names of those involved have been changed accordingly. The five questions that we used for the network maps are:

- 1 *Who have you worked closely with in the last six months?*
- 2 *Who do you socialise with at work?*
- 3 *Whose mobile phone number do you have?*
- 4 *Who do you go to to share ideas?*
- 5 *Who are you connected with on social networks online (for example, Facebook)?*

We used these questions because we wanted to examine the connections our participants drew between work and social relationships at work. Even though our questions demanded simple answers, they are open to interpretation. Networks are bottom-up and largely self-defined, so individuals' perceptions of them are crucial. We were as interested in the disparities and gaps in descriptions of the relationships as in the relationships themselves. Online social networks, for example, can be defined in a number of ways. We were hoping to understand how the participants interpreted the relationships between social net-

working at work and those for personal benefit. These vagaries and variations opened up the discussion for our interviews.

For the network maps, we focused on developing representations of reciprocal networks. That means that where two members of the network disagreed about the nature of the connection, we harmonised the responses by marking them both as negative – as not holding that particular connection. That means all our maps demonstrate the minimum number of reciprocal relationships. These disagreements were likely as a result of our leaving the definitions of questions open. We have taken into account the disparities in answers in our analysis of the findings.

We used the software UCINET⁴⁸ to develop and analyse the data, transforming matrices of network information into visual network maps. Alongside these network surveys we ran interviews with participants across the organisations to deepen our qualitative understanding of the nature of the relationships.

Through the maps and interviews we were looking for something more than the number of colleagues a participant had worked with. We were able to track how companies were using the technologies and platforms to respond to the pressures and opportunities of social networks. By understanding how the organisations appreciate their internal networks, we were looking to grasp how they approached and understood networking more broadly. The maps and our interview data offer an insight into the way firms in a range of sectors are responding to a new *environment* of collaboration. These networks help explain the experience of working in an organisation – and elements of its performance.

Our top-level maps make visible the working connections. But it is what lies behind and outside the maps that is particularly important. Invisible currents pulse *through* networks and hierarchies, defining the quality of relationships, determining the pace of information flow, the patterns of innovation and the experience of work. Our aim was to map networks in non-traditional ways, prompting employees to consider social

connections with their colleagues as well as formal working ones. Looking across the range of maps that emerged, we found that networks were affecting firms in three main ways:

They were tangibly changing how they worked *internally*:

- *From threat to opportunity*: Organisations are now turning away from banning sites such as Facebook, and are using existing online networking platforms like Instant Messenger and Sametime.
- *Bespoke services*: A few of the case study firms were in the process of developing their own in-house platforms, with variable success in their implementation and impact. The downside of these in-house networks is that they can provide too formal a script for people's interactions, writing out the connections between internal and external networking, between work and social life. We also found that they can fail to match how people instinctively want to interact.
- *The work of socialising*: Socialising with colleagues is strongly encouraged across all the case studies. But it is often seen as part of working life and success – it has to some extent become instrumentalised in the eyes of businesses and employees alike.

They were changing the way they worked *externally*:

- *Organisations without walls*: Network technologies increasingly mediate organisations' relationship to other organisations. That stretches from how they find and develop new business, to how they manage their contact with them, through to how they collaborate on projects and share ideas or business.
- *Keeping it real*: Despite technological advances, the differences between online and offline networking are still clear. Technology facilitates easier communication and collaboration, but participants clearly saw the intangible benefits of face-to-face interaction.

And, crucially, networks were having tangible effects on organisations' *core business*:

- Two of our case studies – Imaginatik and Huddle – had technologies that facilitate networking and collaboration as part of their core business. The existence of these new sorts of companies, and their success, demonstrates how seriously networking is being taken by business.
- Across all three of these areas, the benefits of technologically enabled communication mean that work becomes potentially more efficient. Employees can work remotely, and teams that are separated across multiple offices can collaborate to find new business, sustain relationships and develop new ideas.
- *Unfulfilled potential*: There is, despite the wide uptake of technologies, a sense of unfulfilled potential. Organisations feel that there are undiscovered gains to be found from understanding how the marriage of internal and external networking can improve how their organisation works, from both individuals' and organisations' perspective.
- *Network conscious*: Across all three areas, perhaps the most important finding is the recognition employees now give to the importance of thinking explicitly in terms of networks. They increasingly understand the personal value of their network position, and the possibilities for the network capital they can build. This exacerbates the tension between organisation and employee, a tension over ownership and use of network capital. The firms most resilient to this will be those, like some of our case studies, who develop what Duncan O'Leary and Niamh Gallagher, in their report *Recruitment 2020*,⁴⁹ called the 'psychological contracts' between themselves and their employees. That is akin to the social contract, and means looking at the bonds, beyond just financial remuneration, that connect an individual to an organisation.

Internal networking and innovation

We found that organisations have got wise to how the health of internal networking improves communication within the teams. Alongside improving working conditions and reducing conflicts within teams, the flows of information and the internal dynamics are crucial to innovation:

There's no policy stopping people using sites like Facebook – there is a general norm that you're not supposed to spend too much time on there. But they're good here – they trust people not to mess about too much.

Interviewee, large professional services firm

I'm pretty certain about what retention statistics would show. That networking tools and trusting employees to use them, and to give them space to develop them personally, has an impact. You can probably pay them less, and they'll be less likely to move around. I'm sure there is a measurable bonus for productivity. A big economic debate now is whether you can measure the individual benefits of these things, and how.

Interviewee, large professional services firm

In the large professional services firm we spoke to, internal networking was facilitated by the use of existing platforms like Sametime. It allows the team to stay in touch even when a number of them work away from the office for long stretches. And it has helped to make colleagues at all levels more accessible to the rest of the team:

We use 'Sametime', part of Lotus Notes. It's so popular it's become a verb around here – we 'Sametime' each other. We use it for everything from banal banter to very serious or urgent messages, often across the world. It's often to people you'll never meet and who might never reply to your email. We kind of think that email is really '1995'. 'Sametime' is like a half-way house between phone – which is disruptive – and email – which is too passive.

Interviewee, large professional services firm

The crucial point is that Sametime has become fundamental to how the team works, reducing the time it takes to communicate and bringing a wider community of people into the same communication space. There had been talk of more fully developed, bespoke internal service, and the benefits of this were clear to those we interviewed:

I can imagine something like a professional, slimmed down and focused Facebook-style network – for within the team. Perhaps linked to things like

proposals. That kind of networking is really vital. For example, if you get a proposal, you could ask – we've probably done something similar. And we can find out easily. It's nice to be able to streamline that kind of organisational learning and memory.

Interviewee, large professional service firm

The network maps of this firm reveal a telling point about how their use of technology helps foster communication and exchange. Many of the team work outside the office, and often will not be working directly with each other at any given time (see figure 1). However, it is their use of Sametime and other networking tools that allows their ideas exchange to develop – always based on an understanding of each other's expertise and field of knowledge (figure 2).

Figure 1 **Q1: Who have you worked closely with in the last six months? Large professional services firm**

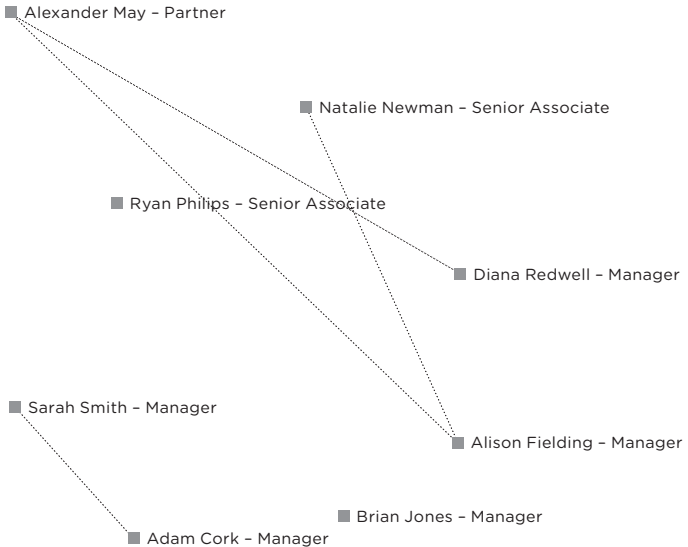
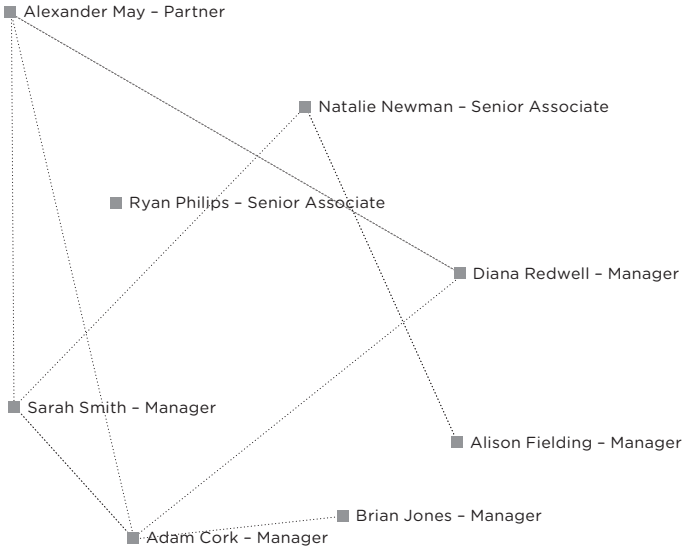


Figure 2 **Q4: Who do you go to to share ideas? Large professional services firm**



Imaginatik is a provider of collaborative innovation and idea management technology. Social networking is in the DNA of their organisation:

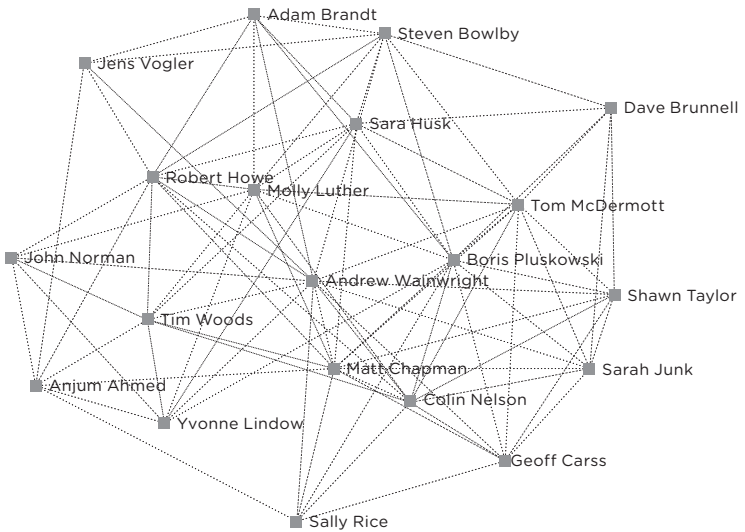
The idea really is that Einsteins live everywhere, but you don't necessarily invite them to your meeting. They might be junior, ex-employees, associates or outside your organisation. But you need to engage them.

Matt Chapman, Imaginatik

They have two main offices – one in Boston in the US, and one in Winchester in the UK, which results in some unique challenges for information flow and team building. As a company whose business model is focused on networking and the power of collaboration, it is unsurprising to see that

Imaginatik's network maps suggest they associated the notion of social networking in the research with their business. So, for example, they have the most densely collaborative responses. And the responses to Q1, Q3 and Q5 reveal similar patterns and a similar intensity of collaboration (figures 3–5).

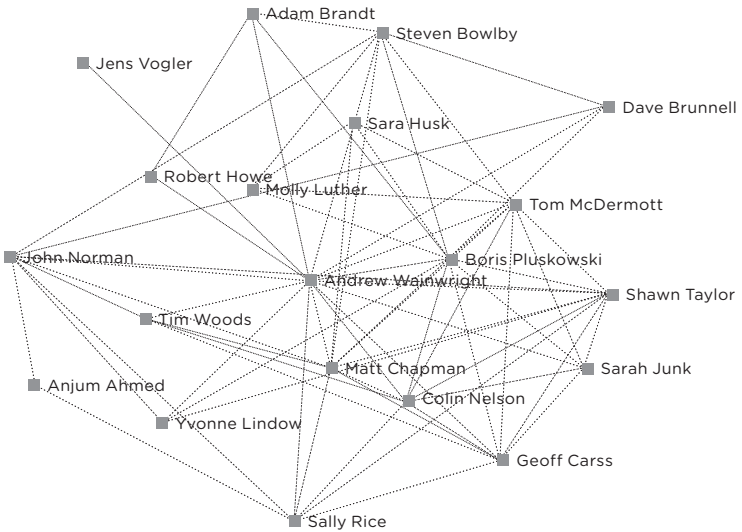
Figure 3 **Q1: Who have you worked closely with in the last six months? Imaginatik**



Imaginatik's success has been in developing targeted services for specific purposes, so the technology is directed and purposeful. It helps organisations derive value from innovative collaborative work, drawing on networks of interested contributors. But that doesn't mean compromising on openness or the collaboration:

We're human beings after all. We like to share things. And in working like that you slip out of your normal roles. Collaboration and innovation happens in these new territories and spaces. I think we're working through

Figure 4 **Q3: Whose mobile phone number do you have?**
Imaginatik

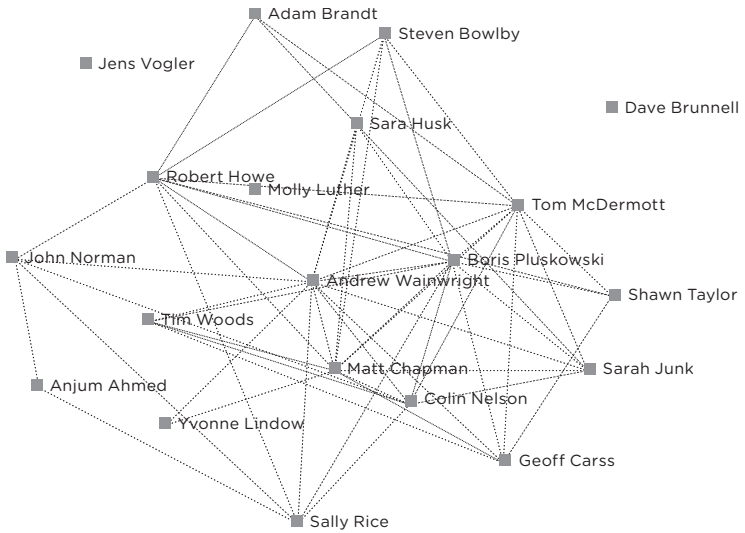


the consequences. I think we're still trying to figure out the consequences – working out what innovation change means.

Tim Woods, development manager, Imaginatik

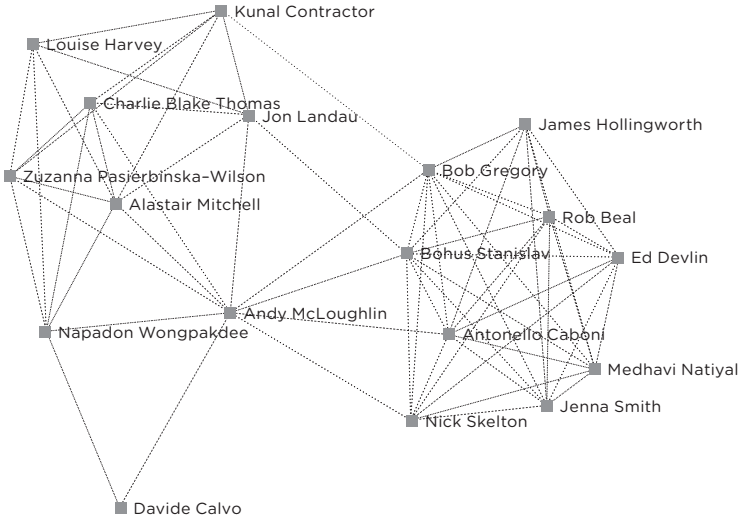
The key was to connect this desire to share and collaborate with the organisational environment. We found similar results when we looked at Huddle. Huddle provides secure online workspaces containing office, project and collaboration tools. It started in 2006, is growing at some rate – 40 per cent a month (www.huddle.net/about) – and employs a staff of around 21 in an office on Bermondsey Street, London – an area that has come to be termed ‘Silicon Bermondsey’.⁵⁰ It’s a reference to the concentration of talent in the growing local high-tech community – a label drawn from a similar concentration at the junction of City Road and Old Street in London.⁵¹ This ‘Silicon Roundabout’ itself, obviously, draws its name from Silicon Valley in California.

Figure 5 **Q5: Who are you connected with on social networks online? Imaginatik**



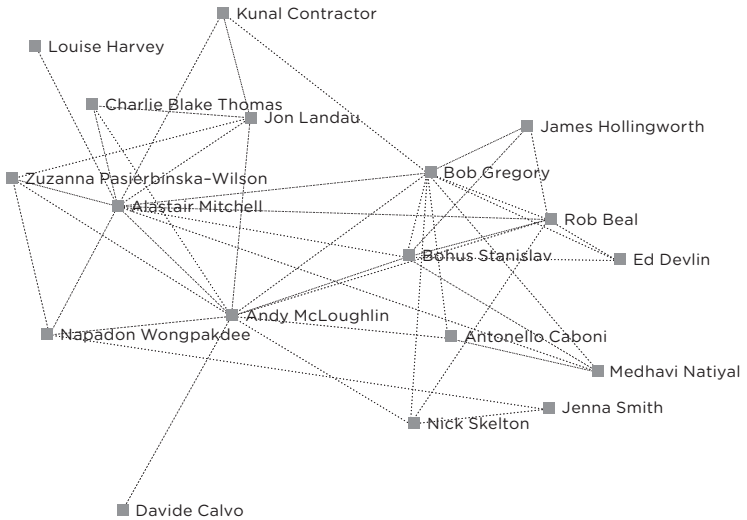
Through our interviews it became obvious that the work ethic of the company matches the ethic of the software tools: it is collaborative, open and communicative. The size of the company makes in-house networking easy and speeds up the flow of ideas. Huddle's internal geography means that employees sit so close to each other that ideas are passed around the office and quickly become common currency for debate. But this in itself is not enough. There is also a network ethic that permits and encourages the promiscuous sharing, and critiquing, of ideas. The CEO is accessible to all the staff, as is the head of the sales arm. There is little sign of inhibition in pitching ideas to colleagues or the bosses, and Zuzanna, Head of Communications, echoed this in our interview with her. Two of Huddle's organisational maps bear this out (figures 7 and 8).

Figure 6 **Q1: Who have you worked closely with in the last six months? Huddle**



Huddle's map for Q1 (figure 6) reveals some clear team working. But the maps charting more social interaction back up the notion that Huddle is a flat organisation. The social ties within the organisation – defined as how those in the office interact beyond just their formally defined role, to share ideas for example – cut across the formal dynamic. Q1 demonstrates how, when thinking about the functional specifics of their day-to-day job, Huddle's staff see themselves as divided into teams, bridged by four individuals. But the mixing of ideas – offline and online – is much less segmented (figures 7 and 8). It helps demonstrate that team working does not come at the expense of an open culture of idea exchange.

A strong belief that collaboration, facilitated by technology, is going to remain a central feature of how work gets done was something echoed across all of our case studies – but some had

Figure 7 **Q4: Who do you go to to share ideas? Huddle**

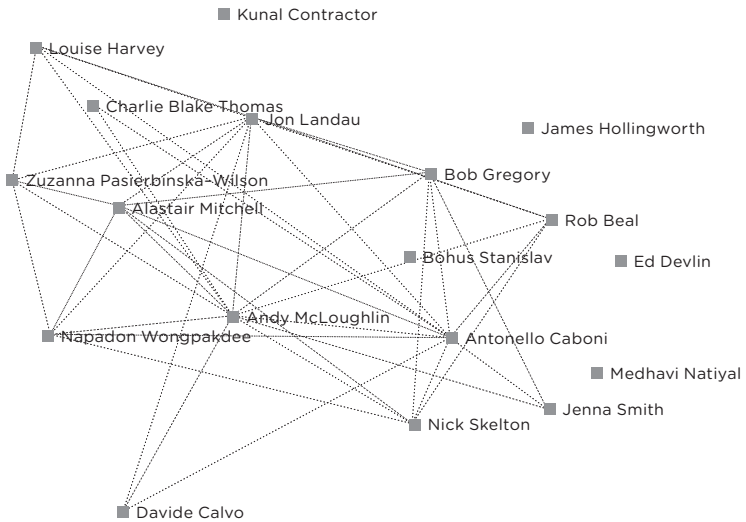
more successfully integrated the tools and ethic into how they worked. And different industries and businesses demand different styles of interaction and support.

As we mentioned above, in the large professional services firm, there had been attempts at developing bespoke internal services to work as idea management and collaboration tools. Although the concept impressed those we spoke to, they found that in reality these internal systems tended to be more time consuming and less likely to be taken up:

The issue with our company is that the answer to every problem is a database. The problem is actually time – this utopian vision of being able to look up all this information and draw it down from the database is a bit unrealistic.

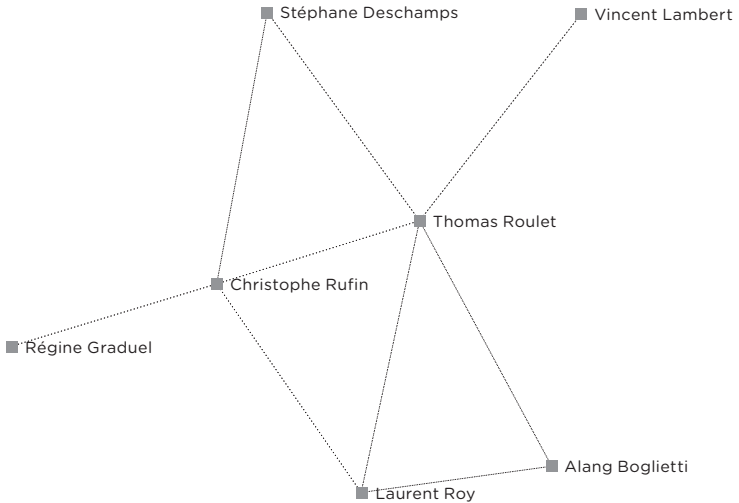
Interviewee, large professional services firm

Figure 8 **Q5: Who are you connected with on social networks online? Huddle**



People had found quick, easy and useful ways to communicate and share the knowledge they needed. The risk with some internal systems is that they become a burden, and something that people do not find fits with their instinctive use of technology.

This is something that communications provider Orange had also picked up on, and which had informed their ongoing work into internal network technology platforms. Christophe Rufin is part of the team developing these platforms for collaboration. They are keen to make sure that the development of the tool matches how people intuitively use networking technologies, so had scoped initially for the most appropriate existing platforms to build on. Christophe and his team are developing an experiment to see how such tools can help Orange work more collaboratively. It's an experiment borne of an appreciation, he noticed, that has developed over the past

Figure 9 **Q4: Who do you go to to share ideas? Orange**

12 months of how better idea management and collaborative tools can be vital to how an organisation shares knowledge and develops new ideas. As a small team, they are closely aligned (see figure 9) – ideas circulate across the team. And this is despite its members not all working in the same place.

The company is really scattered all over the country. So we need networking tools to stay in touch, because locally we don't work on the same things, we don't have the same activity. The chances to meet people working in the same building are very limited.

Interviewee, Orange

The team's experiments in developing networking tools for a large company are telling, and they reveal many of the tensions and trade-offs that mark out the deployment of internal systems – the time investment; the ease of use; the value and return; and

the concern that it is a bolt-on to core professional roles and responsibilities. As Alang Boglietti told us:

You would like to be able to meet more people from different services in the company, to have their opinion upon some subjects. A network tool can be too orientated around the projects, the themes, and our common experience.

Alang Boglietti, Alten SIR, consultant for Orange

The important issue is that the investment in time and changing working practices is something participants felt paid off in the long run, a situation helped when staff are supported by their organisation:

It can be time consuming, especially when it is a new tool. But more collectively, I think it can spare us some time. It is going to replace most of emails; make the collaboration inside the company more productive; solve issues more rapidly. A company which chooses to use these tools should be ready to make some trade-offs, concerning the time spent on networking, because with a long-term view there is a pay-off.

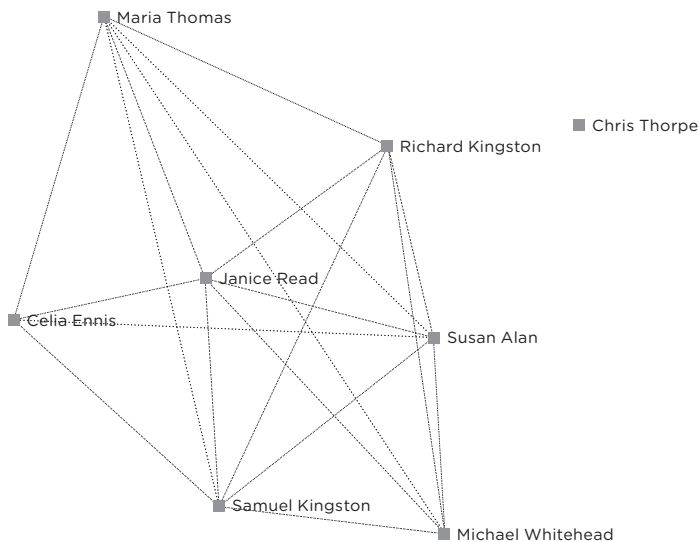
Laurent Roy, Orange

Bridging and growth

The small plastics trading firm we spoke to employs eight people, with its headquarters in the Midlands and an office of two staff in Spain. Their European sales manager operates an office from Alicante in eastern Spain. And they are part of a ‘family’ of businesses that spans the globe, connected together. Internet-based communication has become the key means for keeping in touch from day to day – they use instant messaging software and considered this as sufficient to define themselves as being connected in an online social network (figure 10). The installation of a voice over internet system has allowed the businesses in the group to reduce the cost of managing an intercontinental community of businesses significantly.

Emma Jones, of Enterprise Nation, told us that one of the key factors of small businesses she was involved with – often home work businesses – was that they were ambitious for growth, but a type of growth that allowed them to avoid taking

Figure 10 **Q5: Who are you connected with on social networks online? A small plastics trading firm**



on additional fixed costs and which did not disrupt the low staffing and formal organisational costs that gave them the desired level of flexibility and autonomy. Such businesses are often keen to maintain the flexibility of their networked structure, resisting centralisation and building links to supporting and complementary subcontracting firms. These networking tools facilitate the connections and maintenance of business relationships that allow that form of growth to happen.

External networking

I'd say 90% of my customers I found through the internet. I can start with something as simple as a Google search, or one of the trade networking sites. I depend on it 100%.

Samuel Kingston, European marketing manager, small plastics trading firm

There was at one stage a clear generational divide in the small plastics trading firm. When the European sales manager first started using the internet to find new suppliers and customers, the managing director was sceptical. He believed firmly in the power of face-to-face networking, and doubted that technology could add much. In his experience, trust was so crucial to long-term relationships that the quick-but-cold interaction enabled by the internet seemed unlikely to yield useful returns. But he has come to realise that the ability to find these new clients was an opportunity to enhance the loosely connected set of organisations that make up their business:

I think others in the company may have had doubts about what my use of the internet might do for how we meet and develop relationships with customers. But I think that technology is helping, not replacing, face-to-face relationships. My boss always says technology shouldn't replace the desire to get in the car and go and meet these people. It isn't – it's actually making it easier.

Samuel Kingston, small plastics trading firm

It was clear that technology was helping the firms become 'organisations without walls', both in the ability to tie those within a team together despite geographical distance, and because it is facilitating connections and exchanges with external people and organisations. And the belief among those we spoke to was that it is in these connections outside formal roles that innovative and new ideas come about.

However, it was equally clear that online interaction was a supplement and complement to offline networking, rather than a replacement for it. That is true as much for the internal dynamic as it is for external relationships. All of the organisations we spoke to had some informal or formal initiatives focused on bringing the team together in a non-work setting – whether it be the large professional services firm's ski trips, or the regular team meetings for Enterprise Nation. They may have the daily 'virtual water cooler moments', but for deeper team building, there has to be offline interaction too:

I need the team to buy in to the vision of the company, and be a part of us having a big vision and a plan. We just wouldn't get across that excitement, and share it, if we didn't meet up.

Emma Jones, Enterprise Nation

Core business

I think the world hasn't really got to the stage where LinkedIn and so on are delivering their full potential yet. We haven't worked out the organisational potential fully of these ways of doing things.

Andrew Wainwright, Imaginatik

As organisations make sense of communication technologies they cease being technologically interesting and instead become socially interesting. They are becoming integrated into organisations' everyday life. Enthusiasm for the technologies themselves has waned and we are starting to see a more pragmatic imagination of the local possibilities of global platforms. Far from *determining* their core business, for most companies there is a need to build new relationships with social networking technologies as part of a process of adapting to the broader social and economic changes that are encouraging organisations to loosen up.

The large professional services firm is a great example. There, the business of networking is deeply intertwined with the core business. Participants we spoke to were refreshingly honest about the coincidence of personal network gains with the wins for their company. This may have always been the case, but technology is helping:

The networks we develop outside are about building relationships, demonstrating your expertise and driving business and work into the company.

Interviewee, large professional services firm

The firm has aligned the personal and professional gains of networking for work to career progression. The consequence is

detailed, long-term and complex relationships that have significant implications for internal dynamics. It is a model that other firms would do well to look to. But it is just one way of developing the social contract mentioned earlier between organisation and employee that is increasingly necessary to tie individual with organisation beyond the formal contract.

Networks, knowledge-sharing and power

One reason why disorganisation will not be automatically embraced is that its benefits will not be distributed evenly or fairly. There will be winners and losers, within and across firms, industries and nations...⁵²

The strength of a network is defined not by the quantity of connections, but their quality. Not all connections are equal. Looking down the list of numbers in our mobile phones, we recognise some that we can call at any time without strong reason, some that we might use only as a last resort and some that are hangovers from relationships that are now defunct. Explaining this to someone else would be laborious and involve complicated discussions about the history and context of relationships.

The knowledge bound up in networks is tacit. It is not easily transferable. Having a mobile phone stolen with your bag would be immeasurably more damaging if it meant actually losing contact with the people whose numbers are stored in the phone memory, rather than temporarily losing the means to interact with them. To the thief the tool is the valuable thing. The connections to others are useless. Only the victim can make sense of the information inside the technology, and a thief cannot easily deprive someone of such tacit knowledge. Network capital is therefore *sticky* – difficult to transfer, hard to steal, and extremely difficult to forge. It is this ‘stickiness’ that gives networks such huge value.

At face value, we can learn little from networks. We see just nodes and lines. We need to dig deeper to see how they are being built, maintained and used. The more we dig, the more we see

that there is a huge amount that currently goes unacknowledged. Individuals who build up and are able to use networks can acquire power. But this power is opaque. While formal hierarchies and procedures make transparent the relationships that people have with organisations, networks shroud them in a new mystery. As networks become increasingly important, and technologies emerge that enable us to create new networks, make use of them and map them, we see more clearly the politics of networks. We now need to be honest about the opportunities and uncertainties of networks, the winners and losers, rather than presuming they will open up the many benefits of collaboration and openness. The politics of networks demands that we move beyond a sense of the *inevitability* of networked working to think about how we *want* network relationships to work – for both organisations and employees.

5 Fault-lines

The network dynamics we described in the previous chapter provide huge possibilities for workers who can take advantage of their network capital to further their career, pursue their values and exploit latent opportunities. Networks provide new ways for organisations to make their processes more efficient, recruit and retain staff, pursue new business and create the space for innovation.

But those very same dynamics open up a series of fault-lines, which are putting at risk the very benefits we see emerging. Bottom-up networks are in tension with the top-down logic of hierarchies. Structured organisations must now negotiate new relationships with increasingly empowered individuals. In this chapter, we map these key fault-lines that organisations and individuals must acknowledge and navigate if they are to make the most of networks while militating against their very real risks.

Transparency or opacity

In formal organisations the lines of accountability are clear. Power can be read off from organograms and responsibilities can be situated within clear roles. In a network, the rivers of power often flow underground. We lose track of who is in charge and it becomes unclear where accountability lies. If we want to make the most of networks, we have to make sure we are asking the right questions so that we can bring these currents back to visibility.

Competitive collaboration

Apple is a company that has thrived on its image as the creative professional's sidekick. Its model of business seems to be an

outward ethic of creative looseness, with meticulous management within encapsulated in its proprietary approach to hardware and software such as the iPod and iTunes. As *Wired* magazine has argued, this seems at odds with the Silicon Valley ethic driven by technology's capacity to open collaboration and user-generated contribution.⁵³ This strikes at the heart of the tension between competition and collaboration – and the imperative to tie the innovative openness necessary to drive new ideas with the need to derive value from them.

Charles Leadbeater's book *We-Think* collects together stories which demonstrate the power of collaboration to open the door to mass innovation, helping people achieve collective and individual ends. But at the same time, the imperatives of business demand a level of competitiveness. This fault-line is revealed most starkly as organisations realise the limits of their own internal abilities and collaborate with people outside their walls, capturing the value of those contributions while sharing the benefits. Collaboration is problematic, as described by PricewaterhouseCoopers in their report *Compete and Collaborate*: 'The key to getting the most out of collaboration is determining how to balance it with competition and how to infuse collaboration with traditional management discipline.'⁵⁴

Collaboration asks serious questions of traditional business practices that emphasise secrecy, control and market share.

Whose network is it anyway?

There are two key fault-lines running through the issue of ownership of networks.

First, we have to ask who owns a network – the employee or the business? Organisations can build a cache through a network of associates and acquaintances. This provides its employees with valuable access to new contacts and groups. At the same time, an employee who builds a set of relationships increases their network capital, only some of which will accrue to the organisation. If the individual leaves, they take their network capital with them. It is easier to leave an organisational reputation behind to which they have contributed than it is to

leave the delicate relationships and connections that have been an integral part of that success. If the contacts and relationships, and the resulting network capital, are built up ‘on company time’, but through the individual’s networking efforts, then who can claim to have ownership over the network capital?

Second, if networks are shared between person and organisation, what level of responsibility does the individual have to ‘manage’ their profile to maintain some degree of professionalism? If there is greater openness to personal networking in a work context, there are frayed edges around ownership of network profiles used instrumentally for both work – with organisational implications – and personal gain.

The new network capitalists

The notion of ownership of networks has further implications. In the emboldening of individuals’ social networks, we have seen the emergence of a new breed of ‘network capitalists’. These are highly networked individuals who, as a result, wield significant power independently of organisations and outside hierarchies. There are a number of ways this can happen: in the way that they connect people; in the quality and strength of their relationship with influential or valuable contacts; and in their willingness to share these connections.

Such connected individuals take on the role of switchboard operator, connecting and facilitating others’ collaborations. As Mark Granovetter has argued, connections that bridge the gap between networks – even if they are weak – can be just as valuable as strong personal relationships within a group.⁵⁵ Strong positions within a network also give people significant power. People in these positions can ‘hoard’ contacts, prove to be blockages to rather than facilitators of collaboration, or shape people’s interactions for personal gain. These individuals will increasingly hold significant power. We need to ask about the distribution of that capital, and the ethics of those who hold it. Is there an organisational imperative to intervene?

Work vs life

Distinctions between purely personal and professional life are becoming increasingly blurred. One of the participants in our research signalled what he felt was the approach of the large professional services firm:

They used to talk about work–life balance. Now they only talk of work–life integration. I think that says something.

Interviewee, large professional services firm

The blurring of boundaries between work and life has a good and a bad side. Making work a pleasurable environment is, on the one hand, important. Including trappings that dissolve the boundaries between work, life and play has its down side. Especially if it becomes married with inevitable business imperatives of productivity and efficiency, which regulate employees' behaviour in even the most relaxed and networked of environments.

The social contract

There is a key question in business today in how you get the best and brightest people to work for you. We are lucky to have an incredibly bright bunch of people. Most people have outside commercial interests; we have a lot of entrepreneurs in our company. Personally I don't think it's a bad thing as it's this spirit that very much drives and shapes our growth and development. Whilst there is always the possibility they might leave the company, we very much consider ourselves a family. Our relationship doesn't end when they leave. Ex-employees continue to be involved – whether it is on a contract basis, socially or as an associate.

Matt Chapman, Imaginatik

Traditional organisational structures impose a particular set of relationships on those involved by focusing on one type of organisational form to the exclusion of others. This is designed to maximise value through extracting the most productivity from workers, and organising the work of the firm in the most efficient way. This kind of 'hyper-organisation' lends itself to Taylorist

management,⁵⁶ based on surveillance and oversight (clocking in at the factory, replaced by timesheets to log work and blocks on websites judged to be a distraction). ‘Networking’ can be seen as a distraction from ‘work’, representing a cost rather than an investment in either profitable relationships or organisational goodwill.

But this distinction is breaking down. Employees are becoming freer to collaborate on new projects, ideas and initiatives with colleagues, and to link with new partners and contacts. As the benefits of this looser ethic have become clear, so have challenges for how loyalty and work is measured and tracked. For example, the lack of regular close contact with people, even those one works with, has some important implications. It makes managing people difficult – such as ensuring presenteeism, and measuring or judging the relationship between effort, time and output. This is certainly something Emma Jones had encountered at Enterprise Nation: ‘It’s particularly tough with creative output. How can I see you thinking? I can’t turn on a webcam and see you think.’

Firms are looking to new models of regulation of their employees to ensure efficiency and loyalty. And the choice is quite clear: do they return to newer models of ‘hard’ power – surveillance and smarter behaviour regulation – or do they look to develop more human connections that form the kind of bond or ‘social contract’ that renders overly zealous management unnecessary? There are signs that some organisations are turning to the former. Kirstie Ball, in her expert report for the Information Commissioner’s Office’s report on the surveillance society, argued: ‘Surveillance in the workplace is developing in three directions: the increased use of personal data, biometrics and covert surveillance.’⁵⁷

As a result, there have been increased concerns about the extent to which firms are able to use technology to monitor what it is their employees are doing. The report *Workplace Survey on the Privacy Age Gap*, by Larry Ponemon and Philip L Gordon of Ponemon Institute LLC and Littler Mendelson PC, respectively, found that employees were by no means unreasonable in their appreciation of these tensions. Respondents exhibited a very low

expectation of privacy in their electronic mail over the corporate intranet. They were generally significantly more concerned about their employer monitoring their activities away from the office – whether that means having some authority over non-work blogging or social network use, or at an extreme end using either global positioning systems or radio-frequency identification (RFID) tagging to track employees' whereabouts.⁵⁸

There are some pretty clear choices to be made around these forms of power. These fault-lines are prompting new ideas about loyalty, but also newer ideas about what constitutes the organisation. Forgoing the looseness of organisation does not necessarily imply a move to a more covert form of surveillance-based hard power. These tensions are at the vanguard of a different type of capitalism, in which organisations must not just cross the legal and profit-loss thresholds to continue existing, but they must also meet a range of new criteria to make their business models work.

The staff are the current manifestation of the formal organisation, and organisations as joined together not just by formal bonds but by value-based relationships with staff and associates alike. Just as important are firms' histories. And in the new set of relationships this ushers in, there are a number of individual skills and connections that will guarantee that employees and organisations alike are resilient network citizens.

Conclusion: Citizens

This report is being published against the backdrop of a global financial crisis. The world's capital markets have imploded, kept alive only by dramatic state intervention. At the time of writing, Northern Rock and the Royal Bank of Scotland are under the control of their new majority shareholder: Her Majesty's Government. Equity markets around the world are tumbling at rates reminiscent of 1929. Recession, even perhaps depression, is around the corner.

In these apocalyptic economic circumstances, an investigation of the social and economic role of networks might seem peripheral. But one kind of network – the global financial one – lies at the heart of the crisis. The combination of deregulation and technological innovation has led to a system in which not only information but also emotion – fear and hope – travel fast. In *The Age of Turbulence*, the former chairman of the Federal Reserve Alan Greenspan suggested that new financial networks had increased the resilience of the world's financial system:

A number of global forces have changed the world as we know it. The most visible... has been the increasing transformation of everyday life by cell phones, personal computers, e-mail, Blackberries, and the Internet. These new technologies not only opened up a whole new vista of low-cost communications, but also facilitated major advances in finance... a critical enabler of rapidly expanding globalisation and prosperity.⁵⁹

Greenspan had in mind the capacity of the US economy to absorb the shock of the 9/11 terrorist attacks. As it turns out, the financial system could cope with planes destroying the Twin Towers but not with a sudden loss of faith in lenders overburdened with 'toxic' debt parcelled up from the sub-prime US

housing market. The capital markets rely as much on human factors as technical ones. Once institutions stopped trusting one another, the interbank lending market collapsed.

The kind of networks considered in *Network Citizens* – relationship ties between workers in different types of organisation – are likely to be more important in difficult economic times. Our analysis suggests that the ‘ties that bind’ within organisations are important incubators of innovation and productivity. Networks contribute to organisational resilience, a vital attribute in an economic downturn. The analyses undertaken for this report offer some pointers for businesses keen to capture the value of networks at any point in the economic cycle.

First, smart businesses recognise that ‘social’ networking is not neatly separable from ‘professional’ networking. Attempts to control employees’ use of social networking software in the office may end up damaging the organisation in the long run by depleting its network capital. Of course, bans on Facebook or YouTube are in any case almost impossible to enforce; firms may as well try to put a time limit on the numbers of minutes allowed each day for gossiping. A network permissive culture requires a degree of trust on the part of managers and responsibility on the part of employees; but to the extent that networks add internal economic value, this is usually a risk worth taking.

Second, a greater value ought to be placed on developing networks with people outside the firm. Too often, it is only senior staff who are encouraged to build relationships with people outside the organisation. But the power of horizontal networks across organisational boundaries is clear, and growing. Bringing down the barriers to cross-organisational networking – of allowing porous boundaries – carries risks, of course, not least that well-networked staff are more likely to be hired by someone else. But ambitious people want access to networks anyway, so this is a two-way street.

Third, the value of employees who have left an organisation should be captured wherever possible. The temptation during a difficult economic climate is to hunker down, but this risks cutting off flows of network capital. In particular, companies

should consider how to keep former employees in the network. It is quite likely that if the recession is deep, a large number of firms will have to make redundancies. But ex-employees often retain strong network links to their former colleagues. These links can act to bring in information and experience from outside. Firms that pay attention to alumni management are likely to keep some of the value of internally created networks even when some of the network members move on.

Fourth, firms need to be more alert to the potential dangers of networks. As this report has argued, the positive nature of networks cannot simply be taken for granted. Social networks can be self-sealing, exclusive clubs, which act against progressive goals of equality, meritocracy and openness. There are knotty problems here in terms of organisational response. Managers cannot – and should not – attempt to monitor or police the social networks evolving within the company. But some of the companies featured in this report are recognising that the norms guiding the formation and development of networks are a legitimate collective issue. Simply getting people to consider their networks and how they operate would be a first step towards collective conversations about the ‘rules of the game’ when it comes to operating within networks. An advanced step would be the creation of network constitutions. These constitutions, like that of the UK, may be unwritten, but their intent would be to channel the power of networks in progressive directions.

There is of course a real tension between the idea of a network and that of a constitution. The whole point of a network is its inherent freedom, voluntariness and flexibility. But one of the central arguments of this report is that networks are powerful – increasingly powerful – social institutions, and that this power can be exercised for good or ill. Some individuals have developed very strong networks and therefore amassed considerable power for themselves; these are the people we have labelled network capitalists.

And the value of networks to individuals is likely to rise during a downturn. Networks can offer new job opportunities, commercial possibilities and social support. The time cost of

maintaining networks may seem higher when the economic climate is deteriorating: but the returns are likely to be higher, too.

Networks are powerful – and becoming more so. This is a mixed blessing. The nature of the production and distribution of power is a central concern in a democratic society. Who holds power? On what basis? For whose benefit? To what end? These are the animating, everyday questions of democracy. When networks become more powerful within the labour market – as this reports suggests – they are questions of workplace democracy, too. Of course organisations have a vested interest in ensuring that networks add economic value and support progressive working outcomes, and we have suggested possible organisational implications. In the longer-term, it seems clear that the economic significance of networks will continue to grow. Understanding the dynamic relationship between networks and organisations will become more important to firms. Nurturing and hosting networks can bring benefits in terms of productivity, innovation and workplace democracy.

But to a large extent network democracy has to be driven from the inside: networks are ultimately as good or bad as the people who constitute them. The instincts and norms of citizenship apply to networks as well as nations or companies. For individuals, there is a growing responsibility to operate their networks with an eye to democratic imperatives. We should be realistic: the very power of some networks rests on their intimacy and exclusivity. But the danger of networks becoming self-perpetuating oligarchic old boys' clubs is one which has to be guarded against from within, as well as without. This requires individuals to recognise the power of networks, and their own power within them, and endeavour to exercise it responsibly. Am I excluding certain kinds of people from my network for no good reason? Does the network extend across gender and ethnic boundaries? Should it? What are the unwritten rules of network exchange – and are they fair? These are not easy questions, but as network citizens they are ones we have an obligation to pose and answer.

Notes

- 1 Castells, 'Afterword: why networks matter'.
- 2 See www.enterprisenation.com/content/Home/AboutUs.aspx (accessed 9 October 2008).
- 3 See www.pocket-lint.co.uk/news/news.phtml/18372/19396/view.phtml (accessed 20 October 2008).
- 4 'Facebook is number 2 website, but the growth of social networks is slowing'.
- 5 Newman, 'The structure and function of complex networks'.
- 6 Quoted in Dignan, 'Cisco's Chambers sees collaboration fueling productivity gains'.
- 7 See www.statistics.gov.uk/CCI/nugget.asp?ID=8 (accessed 20 October 2008).
- 8 See for example the work of the Digital Inclusion team, and their definition of digital inclusion: 'The use of technology either directly or indirectly to improve the lives and life chances of disadvantaged people and the places in which they live', (<http://digitalinclusion.pbwiki.com/Digital+Inclusion> (accessed 14 October 2008)).
- 9 See www.alexa.com/site/ds/top_sites?ts_mode=global&lang=none (accessed 20 October 2008).
- 10 'Facebook is number 2 website, but the growth of social networks is slowing'.

- 11 Boyd, 'Loss of context for me on Facebook'.
- 12 Bradwell and Gallagher, *FYI*.
- 13 See for example, Solove, *The Future of Reputation*.
- 14 Israel, 'Getting intimate (with customers) on Twitter'.
- 15 Shirky, *Here Comes Everybody*.
- 16 See www.demos.co.uk/projects/demospodcasts/blog/podcasthelloeverybody (accessed 12 October 2008).
- 17 'Peep Show: Handyman (#4.4)'.
- 18 'Knowledge economy in the UK'.
- 19 BERR and DIUS, *Manufacturing*.
- 20 Ibid.
- 21 European Foundation for the Improvement of Living and Working Conditions, *Fourth European Working Conditions Survey*.
- 22 Rudiger, Towards a Global Labour Market?.
- 23 See for example Tims and Wright, *So What Do You Do?*
- 24 *The Rise of the Ethical Employee*.
- 25 Reeves, *Happy Mondays*.
- 26 Asheim, 'The learning firm in the learning region: workers participation as social capital'.
- 27 Leadbeater, *We-Think*.
- 28 Miller and Skidmore, *Disorganisation*.

- 29 Leadbeater and Miller, *Pro-Am Revolution*.
- 30 Gillinson and O’Leary, *Working Progress*.
- 31 Gallagher and O’Leary, *Recruitment 2020*.
- 32 Skidmore and Bound, *The Everyday Democracy Index*.
- 33 The Creative Group, ‘Surf’s up on the job’.
- 34 Bryan, Matson and Weiss, ‘Harnessing the power of informal employee networks’.
- 35 PricewaterhouseCoopers, *Managing Tomorrow’s People*.
- 36 Coase, ‘The nature of the firm’.
- 37 Williamson, ‘Introduction’.
- 38 Friedman, *The World is Flat*.
- 39 See for example Stark, ‘For a sociology of worth’.
- 40 O’Leary, *The Politics of Public Behaviour*.
- 41 Davies, ‘Rudeness and the network society’.
- 42 Granovetter, ‘The strength of weak ties’.
- 43 Friedman, *The World is Flat*.
- 44 Hannon, Bradwell and Tims, *Video Republic*.
- 45 Skidmore and Bound, *Everyday Democracy Index*.
- 46 European Industrial Relations Observatory, ‘Working time developments – 2007’.

- 47 Coates and Lehki, *Good Work*.
- 48 Borgatti, Everett and Freeman, *UCINET for Windows*.
- 49 Gallagher and O'Leary, *Recruitment 2020*.
- 50 'Elevator pitch'.
- 51 Bradshaw, 'Silicon roundabout'.
- 52 Miller and Skidmore, *Disorganisation*.
- 53 Kahney, 'How Apple got everything right by doing everything wrong'.
- 54 PricewaterhouseCoopers, *Compete and Collaborate*.
- 55 Granovetter, 'The strength of weak ties'.
- 56 See http://en.wikipedia.org/wiki/Scientific_management (accessed 20 October 2008).
- 57 See Kirstie Ball, 'Expert Report: Workplace'.
- 58 Gordon and Ponemon, *Workplace Survey on the Privacy Age Gap*.
- 59 Greenspan, *The Age of Turbulence*.

References

Asheim, BT, 'The learning firm in the learning region: workers participation as social capital', paper presented at DRUID's summer 2000 conference, Rebild, Denmark, June 15–17 2000, www.druid.dk/uploads/tx_picturedb/ds2000-87.pdf (accessed 20 Oct 2008).

Ball, K, 'Expert Report: Workplace' in Surveillance Studies Network, *A Report on the Surveillance Society for the Information Commissioner: Appendices*, Sep 2006, www.ico.gov.uk/upload/documents/library/data_protection/practical_application/surveillance_society_appendices_06.pdf (accessed 20 Oct 2008).

BERR and DIUS, *Manufacturing: New challenges, new opportunities* (London: Department for Business, Enterprise & Regulatory Reform and Department for Innovation, Universities & Skills, Sep 2008).

Borgatti, SP, Everett, MG and Freeman, LC, *UCINET for Windows: Software for social network analysis* (Harvard, MA: Analytic Technologies, 2002).

Boyd, D, 'Loss of context for me on Facebook', 10 Aug 2007, www.zephoria.org/thoughts/archives/2007/08/10/loss_of_context.html (accessed 12 Oct 2008).

Bradshaw, T, 'Silicon roundabout: is this the heart of the UK's new dotcom boom?', <http://blogs.ft.com/techblog/2008/07/silicon-roundabout-is-this-the-heart-of-the-uks-new-dotcom-boom> (accessed 20 Oct 2008).

Bradwell, P and Gallagher, N, *FYI: The new politics of personal information* (London: Demos, 2007).

Bryan, LL, Matson, E and Weiss, LM, 'Harnessing the power of informal employee networks', *McKinsey Quarterly*, no 4, 2007, www.mckinseyquarterly.com/Harnessing_the_power_of_informal_employee_networks_2051_abstract (accessed 20 Oct 2008).

Castells, M, 'Afterword: why networks matter' in H McCarthy, P Miller and P Skidmore (eds), *Network Logic: Who governs in an interconnected world?* (London: Demos, 2004).

Coase, RH, 'The nature of the firm' [1937] in OE Williamson and SG Winter, *The Nature of the Firm: Origins, evolution and development* (Oxford: Oxford University Press, 1993).

Coates, D and Lehki, R, *Good Work: Job quality in a changing economy* (London: The Work Foundation, Sep 2008).

Creative Group, 'Surf's up on the job', Aug 2008, www.creativegroup.com/PressRoom?id=2307 (accessed 12 Oct 2008).

Davies, W, 'Rudeness and the network society', http://potlatch.typepad.com/weblog/2005/06/rudeness_and_th.html (accessed 15 Oct 2008).

Dignan, L, 'Cisco's Chambers sees collaboration fueling productivity gains: web 2.0 as new enterprise engine?', ZDNet, 14 Oct 2008, <http://blogs.zdnet.com/BTL/?p=10423> (accessed 20 Oct 2008).

'Elevator pitch: Huddle's new designs on your working habits', Oct 2008, www.guardian.co.uk/media/pda/2008/oct/07/startups (accessed 20 Oct 2008).

European Foundation for the Improvement of Living and Working Conditions, *Fourth European Working Conditions Survey*, 2007, www.eurofound.europa.eu/publications/htmlfiles/efo698.htm (accessed 13 Oct 2008).

European Industrial Relations Observatory, 'Working time developments – 2007', Sep 2008, www.eurofound.europa.eu/eiro/studies/tno804029s/tno804029s.htm (accessed 20 Oct 2008).

'Facebook is number 2 website, but the growth of social networks is slowing', Hitwise Intelligence, Oct 2008, http://weblogs.hitwise.com/robin-goad/2008/10/facebook_number_2_website_social_network_growth_slowing.html (accessed 20 Oct 2008).

Friedman, TL, *The World is Flat: The globalised world in the twenty-first century* (London: Penguin, 2005).

Gallagher, N and O'Leary, D, *Recruitment 2020: How recruitment is changing and why it matters* (London: Demos, 2008).

Gillinson, S and O'Leary, D, *Working Progress: How to reconnect young people and organisations* (London: Demos, 2005).

Gordon, PL and Ponemon, L, *Workplace Survey on the Privacy Age Gap*, Littler Mendelson PC and Ponemon Institute LLC, 2008, [http://privacyblog.littler.com/Privacy%20Age%20Gap%20White%20Paper%20\(2\).pdf](http://privacyblog.littler.com/Privacy%20Age%20Gap%20White%20Paper%20(2).pdf) (accessed 20 Oct 2008).

Granovetter, M, 'The strength of weak ties', *American Journal of Sociology* 78, no 6 (May 1973).

Greenspan, A, *The Age of Turbulence* (London: Allen Lane 2007).

Hannon, C, Bradwell, P and Tims, C, *Video Republic* (London: Demos, 2008).

Israel, S, 'Getting intimate (with customers) on Twitter', *Business Week*, Sep 2008, www.businessweek.com/technology/content/sep2008/tc2008095_701983.htm (accessed 15 Oct 2008).

Kahney, L, 'How Apple got everything right by doing everything wrong', *Wired*, Mar 2008, www.wired.com/techbiz/it/magazine/16-04/bz_apple?currentPage=all (accessed 21 Oct 2008).

'Knowledge economy in the UK', www.esrc.ac.uk/ESRCInfoCentre/facts/UK/index4.aspx?ComponentId=6978&SourcePageId=18132 (accessed 20 Oct 2008).

Leadbeater, C, *We-Think: The power of mass creativity* (London: Profile Books, 2008).

Leadbeater, C and Miller, P, *Pro-Am Revolution: How enthusiasts are changing our economy and society* (London: Demos 2004).

Miller, P and Skidmore, P, *Disorganisation: Why future organisations must loosen up* (London: Demos, 2004).

Newman, MEJ, 'The structure and function of complex networks', *SIAM Review* 45, no 2.

O'Leary, D (ed), *The Politics of Public Behaviour* (London: Demos, 2008).

'Peep Show: Handyman (#4.4)', 2007, www.imdb.com/character/cho026012/quotes (accessed 20 Oct 2008).

PricewaterhouseCoopers, *Compete and Collaborate: What is success in a globalised world?*, 11th Annual Global CEO Survey, 2008, www.pwc.com/extweb/onlineforms.nsf/docid_response/5A8953F4CA3B5694852573D200648C5C?OpenDocument& (accessed 20 Oct 2008).

PricewaterhouseCoopers, *Managing Tomorrow's People: The future of work to 2020*, 2007, www.pwc.co.uk/pdf/managing_tomorrows.pdf (accessed 20 Oct 2008).

Reeves, R, *Happy Mondays: Putting the pleasure back into work* (London: Pearson, 2001).

The Rise of the Ethical Employee (London: Industrial Society and Future Foundation, 2001).

Rudiger, K, *Towards a Global Labour Market? Globalisation and the knowledge economy* (London: The Work Foundation, June 2008).

Shirky, C, *Here Comes Everybody: The power of organising without organisations* (London: Allen Lane, 2008).

Skidmore, P and Bound, K, *The Everyday Democracy Index* (London: Demos, 2008).

Solove, DL, *The Future of Reputation: Gossip, rumour and privacy on the internet* (Yale: Yale University Press, 2007).

Stark, D, 'For a sociology of worth', Sep 2005,
www.coi.columbia.edu/pdf/stark_fsw2.pdf
(accessed 20 Oct 2008).

Tims, C and Wright, S, *So What Do You Do?* (London: Demos, 2007).

Williamson, OE, 'Introduction' in OE Williamson and SG Winter, *The Nature of the Firm: Origins, evolution and development* (Oxford: Oxford University Press, 1993).

Demos – Licence to Publish

The work (as defined below) is provided under the terms of this licence ('licence'). The work is protected by copyright and/or other applicable law. Any use of the work other than as authorized under this licence is prohibited. By exercising any rights to the work provided here, you accept and agree to be bound by the terms of this licence. Demos grants you the rights contained here in consideration of your acceptance of such terms and conditions.

1 Definitions

- A **'Collective Work'** means a work, such as a periodical issue, anthology or encyclopedia, in which the Work in its entirety in unmodified form, along with a number of other contributions, constituting separate and independent works in themselves, are assembled into a collective whole. A work that constitutes a Collective Work will not be considered a Derivative Work (as defined below) for the purposes of this Licence.
- B **'Derivative Work'** means a work based upon the Work or upon the Work and other pre-existing works, such as a musical arrangement, dramatization, fictionalization, motion picture version, sound recording, art reproduction, abridgment, condensation, or any other form in which the Work may be recast, transformed, or adapted, except that a work that constitutes a Collective Work or a translation from English into another language will not be considered a Derivative Work for the purpose of this Licence.
- C **'Licensor'** means the individual or entity that offers the Work under the terms of this Licence.
- D **'Original Author'** means the individual or entity who created the Work.
- E **'Work'** means the copyrightable work of authorship offered under the terms of this Licence.
- F **'You'** means an individual or entity exercising rights under this Licence who has not previously violated the terms of this Licence with respect to the Work, or who has received express permission from Demos to exercise rights under this Licence despite a previous violation.

2 Fair Use Rights

Nothing in this licence is intended to reduce, limit, or restrict any rights arising from fair use, first sale or other limitations on the exclusive rights of the copyright owner under copyright law or other applicable laws.

3 Licence Grant

Subject to the terms and conditions of this Licence, Licensor hereby grants You a worldwide, royalty-free, non-exclusive, perpetual (for the duration of the applicable copyright) licence to exercise the rights in the Work as stated below:

- A to reproduce the Work, to incorporate the Work into one or more Collective Works, and to reproduce the Work as incorporated in the Collective Works;
- B to distribute copies or phonorecords of, display publicly, perform publicly, and perform publicly by means of a digital audio transmission the Work including as incorporated in Collective Works; The above rights may be exercised in all media and formats whether now known or hereafter devised. The above rights include the right to make such modifications as are technically necessary to exercise the rights in other media and formats. All rights not expressly granted by Licensor are hereby reserved.

4 Restrictions

The licence granted in Section 3 above is expressly made subject to and limited by the following restrictions:

- A You may distribute, publicly display, publicly perform, or publicly digitally perform the Work only under the terms of this Licence, and You must include a copy of, or the Uniform Resource Identifier for, this Licence with every copy or phonorecord of the Work You distribute, publicly display, publicly perform, or publicly digitally perform. You may not offer or impose any terms on the Work that alter or restrict the terms of this Licence or the recipients' exercise of the rights granted hereunder. You may not sublicense the Work. You must keep intact all notices that refer to this Licence and to the disclaimer of warranties. You may not distribute, publicly display, publicly perform, or publicly digitally perform the Work with any technological measures that control access or use of the Work in a manner inconsistent with the terms of this Licence Agreement. The above applies to the Work as incorporated in a Collective Work, but this does not require the Collective Work apart from the Work itself to be made subject to the terms of this Licence. If You create a Collective Work, upon notice from any Licensor You must, to the extent practicable, remove from the Collective Work any reference to such Licensor or the Original Author, as requested.
- B You may not exercise any of the rights granted to You in Section 3 above in any manner that is primarily intended for or directed toward commercial advantage or private monetary

compensation. The exchange of the Work for other copyrighted works by means of digital file sharing or otherwise shall not be considered to be intended for or directed toward commercial advantage or private monetary compensation, provided there is no payment of any monetary compensation in connection with the exchange of copyrighted works.

- c If you distribute, publicly display, publicly perform, or publicly digitally perform the Work or any Collective Works, You must keep intact all copyright notices for the Work and give the Original Author credit reasonable to the medium or means You are utilizing by conveying the name (or pseudonym if applicable) of the Original Author if supplied; the title of the Work if supplied. Such credit may be implemented in any reasonable manner; provided, however, that in the case of a Collective Work, at a minimum such credit will appear where any other comparable authorship credit appears and in a manner at least as prominent as such other comparable authorship credit.

5 Representations, Warranties and Disclaimer

- A By offering the Work for public release under this Licence, Licensor represents and warrants that, to the best of Licensor's knowledge after reasonable inquiry:
 - i Licensor has secured all rights in the Work necessary to grant the licence rights hereunder and to permit the lawful exercise of the rights granted hereunder without You having any obligation to pay any royalties, compulsory licence fees, residuals or any other payments;
 - ii The Work does not infringe the copyright, trademark, publicity rights, common law rights or any other right of any third party or constitute defamation, invasion of privacy or other tortious injury to any third party.
- B except as expressly stated in this licence or otherwise agreed in writing or required by applicable law, the work is licenced on an 'as is' basis, without warranties of any kind, either express or implied including, without limitation, any warranties regarding the contents or accuracy of the work.

6 Limitation on Liability

Except to the extent required by applicable law, and except for damages arising from liability to a third party resulting from breach of the warranties in section 5, in no event will licensor be liable to you on any legal theory for any special, incidental, consequential, punitive or exemplary damages arising out of this licence or the use of the work, even if licensor has been advised of the possibility of such damages.

7 Termination

- A This Licence and the rights granted hereunder will terminate automatically upon any breach by You of the terms of this Licence. Individuals or entities who have received Collective Works from You under this Licence, however, will not have their licences terminated provided such individuals or entities remain in full compliance with those licences. Sections 1, 2, 5, 6, 7, and 8 will survive any termination of this Licence.
- B Subject to the above terms and conditions, the licence granted here is perpetual (for the duration of the applicable copyright in the Work). Notwithstanding the above, Licensor reserves the right to release the Work under different licence terms or to stop distributing the Work at any time; provided, however that any such election will not serve to withdraw this Licence (or any other licence that has been, or is required to be, granted under the terms of this Licence), and this Licence will continue in full force and effect unless terminated as stated above.

8 Miscellaneous

- A Each time You distribute or publicly digitally perform the Work or a Collective Work, Demos offers to the recipient a licence to the Work on the same terms and conditions as the licence granted to You under this Licence.
- B If any provision of this Licence is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Licence, and without further action by the parties to this agreement, such provision shall be reformed to the minimum extent necessary to make such provision valid and enforceable.
- C No term or provision of this Licence shall be deemed waived and no breach consented to unless such waiver or consent shall be in writing and signed by the party to be charged with such waiver or consent.
- D This Licence constitutes the entire agreement between the parties with respect to the Work licensed here. There are no understandings, agreements or representations with respect to the Work not specified here. Licensor shall not be bound by any additional provisions that may appear in any communication from You. This Licence may not be modified without the mutual written agreement of Demos and You.

Humans are social animals, spinning intricate webs of relationships with friends, colleagues, neighbours and enemies. These networks have always been with us, but the advance of networking technologies, changes to our interconnected economy and an altering job market have super-charged the power of networking, catapulting it to the heart of organisational thinking.

Social networks are providing tremendous opportunities for people to collaborate. But until now, thinking has focused only on how organisations can respond to and capitalise on networks. This report argues that we have to look equally at how networks use organisations for their own ends. That is where the new contours of inequality and power lie that will shape the network world. We have to face networks' dark side, as well as their very real potential.

Bringing together in-depth case studies of six organisations, *Network Citizens* maps the key fault-lines that people and organisations will have to address in the future world of work. Not doing so puts at risk the very qualities we had invested in them: openness, innovation, collaboration and meritocracy. Since networks can act for good or ill, incubating the talents and ideas of the many, or promoting the interests of the few, the need for a new set of responsibilities is growing. If we are network members, we must be network citizens, too.

Peter Bradwell is a researcher at Demos. Richard Reeves is director of Demos.



ISBN 978-1-906693-04-6 £10

© Demos 2008

