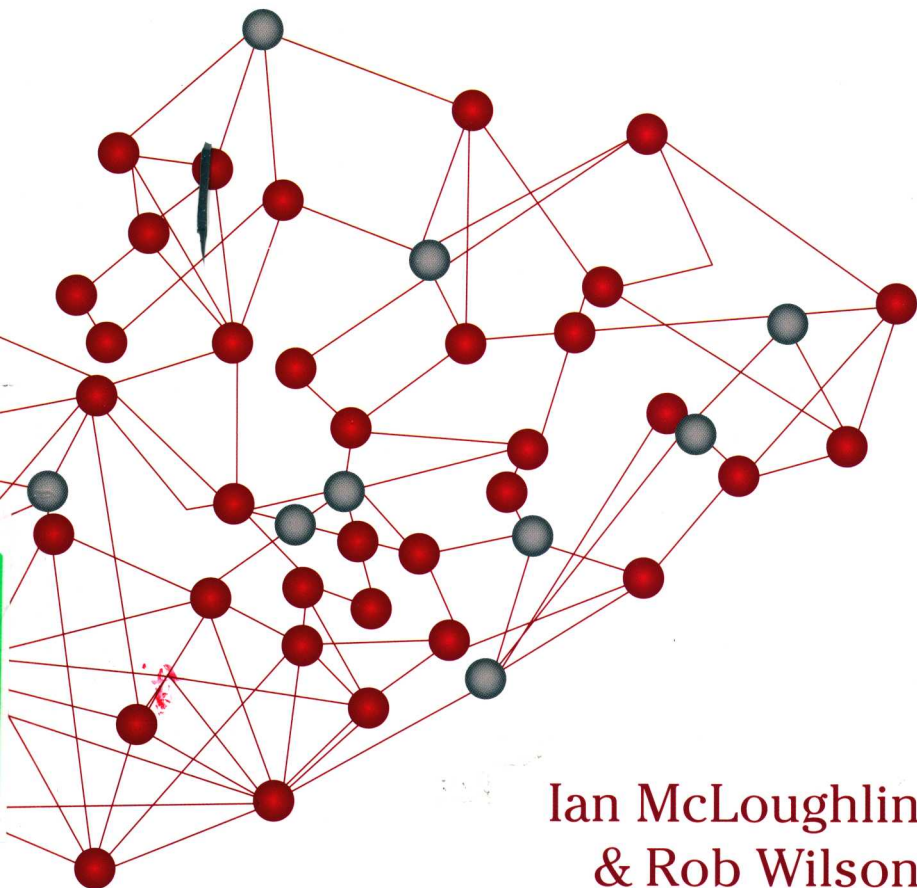


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# Digital Government @ Work

*A Social Informatics Perspective*



Ian McLoughlin  
& Rob Wilson  
with Mike Martin

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## Digital Government at Work

For our Spouses and Families

## Preface

This book takes an essentially social scientific stance as befits the expertise of the principal authors and its target audience. However, the story it presents and analyses has been the outcome of a truly multi-disciplinary engagement beyond the normal boundaries of social science. For me, trained as a hardware designer in electronics, the work on which this book is based was the culmination of a long journey. I spent my early career developing speech technologies and tools for the analysis of human factors in the ICL Systems Strategy Centre at Stevenage. I was then privileged to be associated with a long series of national and European collaborative research projects that contributed to the invention and development of, amongst other things, distributed systems architectures.

Next, by chance, I was parachuted into the world of telecommunications. This was a deeply shocking experience. They seemed to use the same technologies and terminologies as we IT folk did but they were completely different, to the point of alienation, in both the detail of their engineering practice and the business environment in which they operated. It took me quite a time to begin to understand and appreciate the differences between our applications and their services and to learn to work with them, at a time when the technological world was changing profoundly with deregulation and the emergence of the internet and these very distinctions were undergoing a complete transformation.

In the next phase of my career, in the Centre for Software Reliability at Newcastle University, I seemed to spend most of my time in 'forensic' work, trying to understand why things go so horribly wrong so often in the world of big ICT projects, in particular in the public sector. It was at this stage that seeds sown in the distributed systems architecture projects of the 1980s started to develop. I began to recognize the need to be as serious and rigorous about the intentional or 'conversational' aspects of systems as we were about the physical aspects of function, capability, and capacity. Roles and responsibilities had to become

first-class concepts in the architectural discourse or we would continue to make the same mistakes.

Two things then happened in close succession which profoundly changed things. The first was being appointed the technical director of the regional health record development project mentioned in Chapter 3, having had no previous contact with clinical informatics or the public sector. The second was the funding of the AMASE project (outlined in the Appendix) and the fortuitous option of it being hosted at Newcastle University in a social science oriented business school rather than in a school of computing science. From this the collaboration with Ian, Rob, and colleagues, and the struggle to make sense of each other and of the world of public service practice, began.

Usually, the presenting problem involved partnership formation and the building of trust and understanding in the context of the creation of 'systems of care'—a term which is, ultimately, an oxymoron. And faced with these problems, and attempting to adopt the role of honest, disinterested, and informed technologist and systems architect, I was forced to come to the conclusion that the marvellous edifice of rational systems design, which had been the core of my career and interests all my professional life, was a significant part of the problem rather than the source of the solution. This conclusion was, of course, strongly reinforced by my critical social science colleagues! This challenge and dilemma has forced me to delve deeper and deeper into a wide range of literatures in the search for useful meta-theory but I remain an engineer who wants to make better things and to make things better. In social informatics, being critical is not enough. The aim of this book is to make a better mistake than this.

Mike Martin

## Acknowledgements

This book has its origins in an over-a-decade-long journey that started at the University of Newcastle upon Tyne in the late 1990s. The genesis of this enterprise lay in what later became known as 'the full Mike'. This was a lengthy, interesting, and seemingly never to be comprehended mother of all power point presentations on the nature of things socio-technical by Mike Martin—whose contribution to the research and many of the ideas behind this book we gratefully acknowledge.

For much of the time the main vehicle for our endeavours has been the Newcastle University Centre for Social and Business Informatics (SBI). Formed in 1999, this grew into a fully fledged University research centre and in later life has become part of what is now KITE, the Centre for Knowledge, Innovation, Technology and Enterprise. Over the years, research grants, projects, and colleagues have come and gone. Given the collective efforts involved, it is more than appropriate to recognize the numerous other colleagues and research partners who have also contributed to both the development of our ideas and the research findings that we report.

First and foremost, we are hugely indebted to John Dobson, James Cornford, and, last but not least, Roger Vaughan. We owe a special debt to many others as well including, in no particular order, Ros Strens, Sue Baines, Bridgette Wessels, Elaine Adam, Sarah Walsh, Neil Pollock, Sarah Skerratt, Paul Richter, Con Crawford, David Wright, Bob Malcolm, Greg Maniatopoulos, Giampaolo 'Monty' Montilletti, James Carr, Pat Gannon-Leary, Lynne Humphrey, Helen Limon, Bob Sugden, Randal Richardson, Andy Gillespie, Judy Richards, Vicki Belt, Dave Preece, Linda McGuire, Karin Garrety, Richard Badham, Larry Stillman, Mario Bonatti, Nick Booth, and Neil Jenkins.

Thanks are also due to the UK Engineering and Physical Sciences Research Council (EPSRC), UK Office of the Deputy Prime Minister (ODPM)—now Department of Local Government and Communities—and European Commission (EC) and the many other sponsoring and partner organizations, managers, technology suppliers, professionals,



and services users who worked with us on various parts of the research programme. Ultimately, of course, the views presented are our own take on a long collective experience and we exonerate all of the above from any blame with regard to mistakes, misinterpretations, and any other failings of the text.

The writing of this book has been undertaken at opposite ends of the globe as Ian relishes the Melbourne lifestyle and Rob and Mike continue to live out the 'Geordie dream'. Our interactions in completing the text have been aided in various ways by both Monash and Newcastle Universities for which we express our gratitude. Finally, of course, we would like to acknowledge the help and support of our nearest and dearest—Jane, Ellen, Marie, Patrick, Lou, James, Alistair, Fleur and Bernadette, Marie-Louise and Paul—none of whom has been neglected during the writing of this book. This in part explains why it has taken rather longer than expected to complete! A very final thanks then to our Commissioning Editors, especially Emma Booth, for their patience and forbearance.

Ian McLoughlin, Rob Wilson, and Mike Martin

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# Abbreviations

AGIMO	Australian Government Information Management Office
AMA	Australian Medical Association
AMASE	Advanced Multi-Agency Service Environment
ANAO	Australian National Audit Office
APC	Australian Productivity Commission
ATO	Australian Tax Office
B2B	Business to Business
CAF	Common Assessment Framework
COAG	Council of Australian Governments
CSIR	Council for Scientific and Industrial Research (South Africa)
EC	Commission of the European Community
EU	European Union
EHR	Electronic Health Record
ERDIP	Electronic Record Development And Implementation Program
ERP	Enterprise Resource Planning
FAME	FrAmework for Multi-agency Environments
G2B	Government to Business
G2C	Government to Citizen
G2G	Government to Government
GFC	Global Financial Crisis
IfSC	Information for Social Care
IG	Infomation Government
IRT	Information, Referral, and Tracking
JUG	Joined-Up Government
LSP	Local Service Provider
NAO	National Audit Office
NBN	National Broadband Network (Australia)
NEHTA	National e-Health Transition Authority
NHIMAC	National Health Information Management Advisory Council
NHS	National Health Service
NESTA	National Endowment for Science, Technology and the Arts
NPfIT	National Programme for Information Technology

Abbreviations

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ODPM	Office of the Deputy Prime Minister
OECD	Organization for Economic Cooperation and Development
OLDES	Older Peoples E-Services @ Home
PCEHR	Personally Controlled Electronic Health Record
PD	Participatory Design
PwC	Pricewaterhouse Coopers
RFA	Requirements for Accreditation
RSCC	Regional Smart Card Consortium
SAP	Single Assessment Process
SEHR	Shareable Electronic Health Records
SPOT	Single Point of Truth
UN	United Nations
VESCR	Virtual Electronic Social Care Record
WHO	World Health Organization

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