

## Book Review

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**Digital Era Governance: IT Corporations, The State and E-Government**, by P. Dunleavy, H. Margetts, S. Bastow and J. Tinkler, Oxford University Press, 2006. (289 pages)

As government officials, academics, and IT industry personnel all over the world struggle to come to terms with the speed, scope and sheer volume of technologies emerging in the ‘e-government’ space two questions in particular are on many people’s minds: “*how are we doing in comparison to the rest of the world?*”, and “*what will e-government mean for the future of public management?*” The inter-jurisdictional critique of government performance in IT management provided by Dunleavy et al goes a long way to providing some answers to both of these questions.

Meaningful and relevant inter-jurisdictional comparisons on any issue, especially IT, are fraught with difficulties as there are so many variables that influence decision-making, investment and implementation. The authors of this book have created a comparative analysis of IT investment and implementation using a ‘fuzzy set’ methodology derived from the work of Ragin (2000). This allows them to group countries as diverse as the UK, Japan, New Zealand, USA, Canada, Netherlands and Australia by describing the extent to which they conform to certain patterns of IT management, contracting and investment.

The authors use three indicators to build up an effective picture of government IT performance:

- the scrap rate for government IT projects
- the costs of government IT, and
- the modernity of government systems and equipment (Chpts: 3–5; pp. 64–134).

These are clever choices in that they go to the heart of what is important for government organisations and analysts alike. The analysis is supported by multiple examples from each of the countries examined, and a clear explanation of the authors’ interpretation of how and why countries belong to, or do not belong to, a particular set. Even if occasionally the reader is left debating whether or not they agree with the allocation of a particular country to a particular category on any given variable, it is very clear that there is significant room for movement and categorisations have been made on a level of weighted probabilities. Overall the outcomes work, and the reader can understand the underpinning rationale for the analysis.

Equally as astute in judgment is the presentation of in-depth case studies of how each of the seven countries has progressed with IT innovation in the areas of tax, social welfare and immigration (Chpts: 6–8; pp. 135–215). These three chapters provide a comprehensive historical overview of IT development and implementation, and pragmatically demonstrate the centrality and importance of IT in critical areas of government. This material should be heavily mined by those teaching e-government all over the world for its valuable record of e-government endeavours over the past 20 years.

The details provided on the implementation of e-government initiatives is however merely a context for the authors’ exposition on the impact that IT developments in the government sector will make on the future of public management. In particular, the text presents two significant challenges to current thinking on: (i) the role of IT in policy and other forms of decision-making, and (ii) the movement from new public management (NPM) to ‘digital era governance’ (DEG).

Throughout the text the authors build a strongly crafted case for the centrality of IT in public management. They argue that IT not only has influence on information management and service delivery changes, but also on the future direction of democratic governance. They are careful to state in their conclusion that this is not an argument for technological determinism but for recognition of the centrality of IT systems in modern public management – “... while the impacts of technological change are never direct and are always filtered and conditioned by organisational, social, and political processes, they have been and will be substantial in the sphere of government also” (p. 248).

As a reader, the question this raises is where does centrality end and determinism start? Throughout the book Dunleavy et al present technology as a central contributor to the rationalisation and modernisation of public management, with a role that is more than simply an enabler of these processes. They assert for example that “... the salience of IT systems for modern policy making and the levels of transition and transaction costs involved in changing major IT systems are in many contexts just as substantial and restrictive as the impacts of legal and regulatory constraints” (p. 25).

There is no doubt that some of their arguments for elevating the consideration of technology in public management discourse are extremely compelling. The advent of the internet provides unprecedented opportunities for new and innovative ways to deliver government services and information to the public. There is also a strong likelihood that over time potential new forms of government-citizen relationship may emerge as people use ICTs to interact differently. What the consequence of this will be on the future of democracy can only be guessed at.

Dunleavy et al present the view that government organisations are hierarchical, socio-technical systems where control is maintained through the systematic documentation of decisions, providing institutional memory; consistency; greater efficiency; economies of scales; and contributing to knowledge development. They assert that computerised information systems have become pervasive and central to bureaucratic organisations and as a consequence that most policy change and public management reforms now focus their timing and scope on shifts in the parallel infrastructure (p. 24). That is, “... government IT changes are no longer peripheral or routine aspects of contemporary public management and public policy changes, but increasingly important and **determinant** [my emphasis] influences upon what is feasible” (p. 217).

This latter assertion raises more questions than it answers. Dunleavy et al would have it that IT is now so costly and complex that it limits policy maker’s discretionary action in ‘fixed and non-tractable’ ways (p. 26). That is, that if the computer software doesn’t ‘allow’ a particular transaction to take place, then it can’t be done. This implies that it is the IT *system* that controls the development of policy, rather than the policy-makers. The authors argue that this is compounded by the fact that the institutional knowledge and skills required to ‘work around’ IT limitations no longer exists in organisations; that discretionary judgment is restricted by regulation; that changes to IT systems are costly, complex and time-consuming; and that IT expertise is largely outsourced forcing organisations to pre-specify IT services and capabilities thereby reducing the degree of flexibility and adaptability they might have (pp. 26–27).

All of this undoubtedly is an accurate reflection of reality, and at the same time over-simplifies the situation. In spite of the authors’ assertion otherwise, it is difficult not to see it as an argument for technological determinism that implies that the art (and science) of policy making is fast going to become (if it is not already) irrelevant as it will be controlled by the strengths and weaknesses of software code and the degree of agility built into IT systems.

This position seems to be a bridge too far. The consideration of IT as one variable amongst many (and even as a core consideration) can be accommodated in any decision-making model. There is no doubt that any requirement to change existing IT systems, or to develop and implement new ones, needs to be

considered carefully by decision-makers as they can impact significantly on the cost and timing of the introduction of new government policies.

However, at the point that these considerations become the sole arbitrator (or even a primary arbitrator) of whether a new policy is feasible or not, then the power to control social interaction, or even business practices, moves from humans to machines, and we enter a brave new world where the landscape is completely unknown. There is no evidence in any of the seven countries examined in this book that technology considerations lead decision-making rather than being used to enable it, however great the challenges are in doing so.

Early findings from current research on the transformative potential of e-government indicates that senior public servants in New Zealand are more likely to see the limitations of an existing IT system as a justification for policy innovation rather than an inhibitor to change. For those managers interviewed one of the key considerations in introducing new e-government initiatives is the perception of 'stewardship' and the long-term social and economic interests of New Zealanders.

Technology is perceived by respondents as a necessity in a global economy and the cost of continuous upgrade to enable it to be adapted to meet new policy requirements as a part of the reality of the digital era. The respondents in the research indicated that making the technology as flexible as possible for future development was part of the risk management challenges they faced. These early results would indicate that public service officials (at least in New Zealand) perceive technology as a business enabler rather than a determinant of policy and other forms of decision-making. In this respect, IT systems clearly need to be a central consideration in the *implementation* of public policy, but do not necessarily feature as a central consideration in the *development* of public policy. This distinction is a critical one that is equally important in the debate on 'digital era governance' (DEG).

DEG is an interesting and challenging concept. Dunleavy et al. set out a theoretical framework consisting of three parts: (i) reintegration (largely undoing some of the fragmentation created under NPM); (ii) 'needs based holism' (citizen-based services); and (iii) digitization changes as government services go online. Each of these areas contains 7–9 observable trends (pp. 228–242). These are largely a collection of current trends within the IT sector, and while they represent important movements in the thinking of government officials about the influence of technological choices on socio-political relationships it is difficult to see them as a cohesive basis for a governance system.

The authors dismiss 'utopian' concepts of future public management such as Fountain's 'virtual state' (p. 225). In doing so they miss the point that such typologies are conceptualisations of systemic change influenced by developments in the technical field, not frameworks of IT governance. In spite of the authors' presentation of DEG as a public management model, the components of it take no account of the constitutional, political and democratic imperatives that any public management system is based upon. The authors appear to fail to recognise that the centrality of IT as a policy or decision-making consideration does not, and should not, elevate it to the centre of the public management model.

To some extent the debate about the weaknesses of NPM (especially as it is perceived to operate in the UK) in the concluding section of the book detracts from the analysis presented in the preceding chapters. One is left with a desire to know much more about the governance systems that operate in the Netherlands where IT innovation according to the criteria applied in this research consistently comes out on top. A detailed comparison of the perceived strengths of the Dutch system and how they could usefully be modified or enhanced to overcome weaknesses observed elsewhere could have perhaps provided some guidance to decision-makers about how IT could be managed more effectively in the future. Not to have included such analysis is an opportunity missed.

There are few, if any, people working in the e-government space who would not agree that modern technologies offer unprecedented opportunities for the creation of new socio-political interactions that

may lead to changes in public management. At the end of the book, Dunleavy et al offer a tantalising appetiser on what the possible permutations of such change might be (Chpt 9: pp. 242–248). For all those interested in how e-government might influence the future of public management there is much in this book to consider and debate.

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