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BEFORE, AFTER or DURING the Reforms?

Towards Information-Age Government in New Zealand

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A new reform movement?

Twenty years after the state sector reforms in New Zealand, high expectations of a new reform era for the New Zealand government can be observed. Reaping the benefits of the information and communication technology (ICT) revolution, government aims to achieve fundamental changes in the ways it works, collaborates and engages. Two important milestones for enabling the 'transformation' of the New Zealand government are the transformation of the operation of government by 2010, as government agencies and their partners use technology to provide user-centred services and achieve joint outcomes, and the transformation of people's engagement with government by 2020, as increasing and innovative use is made of the opportunities offered by ICTs (State Services Commission, 2006).

The New Zealand government acknowledges that E-Government, as this 'transformation of government' is being called, is the more necessary now that a new generation of 'digital natives' is growing in New Zealand – people who have grown up in an online world. These people most likely have different expectations of the way in which they interact with government than do older generations, and the New Zealand government explicitly wants to meet these expectations. E-Government is perceived to be vital to the social and economic well-being of New Zealand. E-Government, therefore, is acknowledged to be critical to the New Zealand public management system (ibid).

A new public management reform seems to be most desirable in New Zealand, and, perhaps, to a certain extent inescapable. The big question, however, is whether the New Zealand government will be able to achieve its ambitious reform objectives, and, if so, what the substance of this new, new public management may be. In this article I propose that the transformational potential for government is certainly there, but not all that evident to us at the moment. I will argue that we need an alternative perspective, *an informational perspective*, if we are to understand more fully, and react upon, the transformational potential of ICTs in government and in its relationships with society (Lips, 2007a).

E-Government or t-government?

The New Zealand government is not the only government looking for enabling transformation by making use of new ICTs. E-Government has become an important policy agenda for governments around the world, with key transformational objectives attached to it, such as public service transformation, transformed public engagement and establishing citizen-centric government. Moreover, governments around the world are already using ICTs for modernising government – for improving public service provision, enhancing internal efficiency, and building trust between government and citizens, for instance. The tools of E-Government are many and varied: examples in the front office are the internet, smart cards, CCTV cameras, biometrics and mobile phones; in the back office of government we can think of databases and intranet facilities.

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Internationally, however, outcomes of these E-Government strategies seem thus far to point towards restricted achievements – establishing similar but improved government, perhaps, rather than reformed or transformed government. Governments are struggling to bring about the fundamental changes required to achieve transformation. One explanation for this is that, in many countries, the focus of E-Government has mainly been on the tools themselves: on the 'e' of E-Government. With the internet as a dominant focus in most E-Government endeavours, the following four-stage model for E-Government development has become widely accepted:

1. the *information* stage, in which governments start to adopt the public internet and create websites where they put their information online;
2. the *communication* stage, in which governments add interactive features to their online presence, such as email;
3. the *transaction* stage, where governments set up online transaction facilities in their service relationships with citizens and businesses; and finally
4. the *transformation* stage, in which governments achieve 'whole-of-government' service transformation.

Nowadays it is widely believed that this linear pathway needs to be followed to achieve 'full E-Government maturity', as it is called in the influential benchmark reports of Accenture (2006). Recent E-Government benchmark studies show that most governments can be situated at the first levels of E-Government development, with a substantial number of countries now moving to the transaction stage. Usually, the general conviction is that if the ICT tools are in place, well designed and with appropriate features such as high security, reliability and accessibility, anticipated benefits will be met. Causes and effects seem to be pre-defined by the right ICT applications; the end user will be satisfied and E-Government take-up therefore will follow automatically.

Interestingly, however, E-Government projects are often perceived as failures rather than successes (Heeks, 2006). Indeed, survey results show that internationally, the take-up of E-Government services remains modest, and in some countries even declines when compared to uptake through other service provision channels (European Union, 2005). An important lesson in this respect is that E-Government is not just about applying the technology: it involves redesigning the way government works (e.g. OECD, 2005; *Economist*, 2008). For large bureaucratic organisations like government agencies, this 'next stage' in E-Government activity may be very difficult to achieve. According to the OECD (2005), the redesign of government will be more complex and challenging, possibly more costly, and potentially more risky, especially because required changes may be quite disruptive of established government structures, culture and management arrangements. Moreover, benefits of these redesign initiatives are likely to be less readily apparent to policy makers and outside observers. A further hard question for governments at present is how effectively to reach those citizens who will not or cannot go online (*Economist*, 2008).

In summary, the transformation of government requires dealing with fundamental questions regarding existing government structures, functions, cultures and relationships. E-Government, on the other hand, has been a top-down, supply-driven concept so far, with the available technology as the main driver for governments to modernise public service provision. It is only more recently that leading countries in E-Government are starting to acknowledge that transformation may not be driven purely by technology; that, actually, the technology, or the 'e' in E-Government, is often the least important factor in successful E-Government initiatives. And, most challengingly, that truly transformed, citizen-centric government, for instance, may well require the input of citizens at the design as well as the consumption stage of E-Government. Experiences with technological revolutions in the past teach us that innovation is neither a linear nor a rational development: innovation is, in fact, a *process* as much as it is an *outcome* or a *product*. We first need to learn how to use the new technologies, before we are capable of learning how to do things fundamentally differently (Castells, 1996).

An underestimation of government in E-Government

This capability to learn requires the availability of empirical knowledge about how E-Government applications are changing the structure and functioning of government.

Surprisingly, however, there is not much knowledge available at all. Although public management reform has been a focus of scholarly attention (e.g. Osborne and Gaebler, 1992; Kickert, 1997; Pollitt and Bouckaert, 2000; Peters and Pierre, 2003), the transformational potential of the ICT revolution for government has largely escaped scholarly interest so far, with a few good exceptions (e.g. Bellamy and Taylor, 1998; Snellen and van de Donk, 1998; Fountain, 2001; Lips, 2007b). Interestingly, a similar lack of interest can be observed among practitioners: although governments are developing policy strategies to achieve ICT-enabled 'transformational government', the fundamental concepts, structures, frameworks, processes and relationships in public administration are not presented as a strong part of the reform debate (Lips, 2007b).

What we know about E-Government, here in New Zealand and elsewhere, is based primarily on quantitative research data reporting on the availability and design of E-Government applications, such as presented in international benchmark exercises. We do not know much about the *use* of E-Government applications; nor do we know much about the *users* of E-Government (Lips, 2007c). Empirical, qualitative research on the why and how of introducing and using ICTs in government is hardly available.

Again, a dominant focus on the 'e' in E-Government has led to an underestimation of the 'g' in the same concept. This situation seems to be more and more acknowledged, not only in academia, where E-Government researchers are starting to acknowledge their lack of institutional understanding in trying to explain E-Government (Grönlund, 2005; Andersen and Henriksen, 2005), but certainly also in the E-Government practitioners' world. A good example of the latter is the location in government departments of organisational units whose names usually start with an 'e' or 'IT', where E-Government topics and strategies are handled.

Governments, however, are starting to discover that E-Government initiatives may involve much more than managing an ICT project. Several of these E-Government initiatives are touching upon and confronting fundamental aspects of government in a way that a repositioning is needed if government wants to become aligned with the emerging information society. For example, the use of blogs by public officials and politicians raises questions about the extent to which official public policy statements need to be adhered to and freedom of expression can be permitted. The desire to share information across government silos to arrive at more effective, citizen-centric policy solutions is often prohibited by privacy legislation. And, more recently, hundreds if not thousands of people, with more than 70% of them based in New Zealand, engaged with government in drafting the new Police Act with the aid of a wiki, leading to real out-of-the-box thinking: the New Zealand police officer in charge of developing the new act commented, 'People are calling it "extreme democracy" and perhaps it is ... the person on the street has got the best idea about how he or she wants to be policed as they are a customer.'[i]

In many examples of this kind, where the use of ICTs confronts government, we see that government is not analogous to private companies. Government has a unique contract with its society. We have made it very difficult for government, as the public guardian of our collective interests, to step, or even think, outside its institutional box. Laws, regulations, public participation procedures, accountability structures, silo government: these are all examples of the checks and balances we have created to ensure democratic government. Governments thus have much more stable relationships with society and within their own institutions compared to a private company, for instance. With this strong tendency towards continuity, governments are primarily inclined to use ICTs for achieving the same tasks and activities better: for business optimisation and rationalisation, rather than for doing things differently. This implies that fundamental changes in government as a result of E-Government initiatives are usually *institutionally* enabled (or even disabled!) rather than *technologically* driven (Lips, 2007a).

E-Government and the new public management system in New Zealand

The new public management (NPM) system further reinforces the tendency of achieving things better in government, rather than differently. With main NPM-drivers being to achieve increased efficiency and accountability, the seductive rationality of new ICTs appears to be irresistible. ICTs can be used to optimise the current NPM system further, through, for example, new ICT-enabled opportunities for evidence-based service provision, fraud detection, or enhanced trust in service relationships with the general public. NPM is not at all dead in the information age, as some academic colleagues believe (Dunleavy et al., 2006), but very much alive.

NPM is not primarily inclined to support transformation. On the contrary, within an NPM environment each individual silo of government is focused on developing policy solutions needing to be implemented – solutions usually predetermined by the minister's needs, within constrained budgets, and not especially open to deliberation. Solutions need to tick pre-defined outcomes in what is in effect a vertical scheme. If you as a citizen are in a situation which does not match the organisational fragmentations of government, it becomes your problem to join it up. In New Zealand, having a child with autism is a good example of a situation in which parents are struggling with joining up a wide range of siloed government agencies.

This example is what we call in academia a 'wicked problem' (e.g. Conklin, 2006), a complex issue which is difficult to grasp by its very nature: it involves an issue with many interlinked factors, a permanent lack of information and therefore a high degree of uncertainty, multiple perspectives on how to define the problem as well as its solutions, multiple individuals, government agencies and other organisations affected by it, and established governmental frameworks which make change very difficult to achieve. Public managers find themselves increasingly

confronted with these wicked problems. At the same time, society is putting pressures upon government to help with and solve these problems, pressures which are often reinforced by societal crises, making insufficient government support and a lack of joined-up government explicit. Obviously, these wicked problems hit the decentralised, rationalised and efficient NPM system full on, causing major struggles in, for instance, in determining shared outcomes among agencies involved, appropriate budget allocations and accountability structures. Interestingly, however, exceptions to these vertical 'rules' and practices can be observed in the front line of the New Zealand NPM system. It is here that small pockets of what I call 'horizontal forms of innovation' can be found. The research project 'Better Services for Kiwis', which is being conducted under the Emerging Issues Programme of the School of Government at Victoria, led by Derek Gill with research contributions from Elizabeth Eppel, Bill Ryan

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and myself, demonstrates that many front-line staff members in New Zealand are doing an excellent job in achieving innovative solutions by breaking out of that paradigm of vertical policy formation and implementation. These front-line staff commit additional time, energy and resources to promote the unique situation of the citizen against the top-down, pre-defined outcomes of government. They move around or break down silos and arrive at effective citizen-centric solutions (Gill et al., 2007).

The 'Better Services for Kiwis' project, and others too, such as the New Zealand Bioethics Council project, where new, horizontal forms of public engagement are being explored, help us to consider where government might be able to look sideways instead of following a vertical, rationalised and fragmented track for solving complex public policy problems: where, in fact, government could meet the people, share information and jointly define with them potential solutions; where, from a new public management point of view, available 'social capital' in New Zealand – social innovation potential which is strongly embedded in New Zealand's 'number 8 fencing wire mentality' – can in effect become economic capital for this country. Solving wicked problems effectively in horizontal ways can not only increase the quality of life in New Zealand, but also remove some of the opportunity costs of vertical government. Transformation need not be a 'government only' process, therefore.

ICTs as disruptive technologies

Another possibility is that ICT-enabled transformation in government and the new public management system may not have been visible to us so far. Similar to other technical revolutions in the past, ICTs are *disruptive technologies* (Christensen, 2003): the distinctive capabilities of ICTs, namely that they act on *information*, enable us to do things differently (Castells, 1996). As information is ubiquitous in government, the innovation potential of using ICTs in government and its relationships with society is both substantial and fundamental (Taylor, 1998). We do not see this particular potential for innovation if we are taking a restrictedly technical perspective on E-Government; nor if we are taking a restrictedly managerial perspective on E-Government (Taylor and Lips, 2004). We do see it more clearly, however, if we take an *informational* viewpoint to explore E-Government in operation empirically. The effectiveness of taking an informational point of view becomes increasingly strong now that E-Government is becoming more and more transactional and interactional (Lips et al., 2007; Taylor et al., 2007).

For example, if we consider the application of a multifunctional smart card for a range of public services in UK local government from a technical point of view, we can see a card which is secure, reliable, and has the capabilities to carry a lot of personal information about the cardholder and exchange this information with service-providing organisations. If we consider the application of this multifunctional smart card from a managerial point of view, we can see an expensive ICT project with limited added functionality over traditional card applications like a library card or student ID card, and with enormous additional political costs in terms of trying to join up government in the multifunctional smart card's back office. However, if we take an informational perspective towards the use of this smart card and explore what information is being collected, shared and used in service relationships, we observe that whilst there is very little personal data sharing between the few lined-up (not joined-up!) public service providers, nonetheless 'loyalty points' are collected, stored and spent as a result of using the smart card in ways considered as good 'citizen behaviour', such as selecting healthy food in the school canteen or using the right garbage bins for rubbish collection.

Let me give you a further example from our E-Government research in the UK (Taylor et al., 2007; Lips et al., 2007). We do not see any transformation if we look at the way in which, in implementing an e-benefits project in the UK, an official conducts a face-to-face interview at the benefit claimant's home, using a tablet personal computer with wireless communication capabilities to process the claim and at the same time collect necessary proofs of identity, such as a national insurance number. Following this initial registration and successful acceptance of the benefits claim, housing and council tax benefit claimants' information is electronically

sent to the Department of Work and Pension's Housing Benefits Matching Service. The DWP will run both what they call 'logistic regression' processes and risk analysis processes on that data to look for claimants whose circumstances are likely to change frequently, and therefore are more likely to be associated with fraud or error in the future.

Taking an informational perspective to look at this case, we can see that personal information of the benefit claimant, in combination with general information on behavioural patterns of claimants in the past, is used to assign a benefit claimant to a predetermined category against which there is an assigned risk score. This assignment to a particular 'social category' determines the frequency and intensity with which the claim will be reviewed. The lowest risk categories are in the pensioner groups, and the highest risk categories are in working-age claimants, with a specific subset of single parents living in private landlord accommodation being the highest risk of all. Individual risk scores are sent to the local authority, with recommendations attaching for their claim review regime. The effect of this is that citizens are being located differently by local inspectors in terms of the trust that can be assigned to them as claimants and, with that, the administrative assessment of which inspection regime is needed to check upon the claimant.

If we consider this E-Government case study in the light of administrative decision making, we can see fundamental changes in the way public servants are making assessments on the basis of newly available information on the citizen (Lips et al., 2007; Taylor et al., 2007).

In general, from an informational perspective on E-Government, if we use ICTs in government we are actually abandoning traditional information practices and activities. We are starting to do things differently than we have been used to so far. We are starting to collect, process, manage, analyse and assess information differently in government, and, in doing so, we are also starting to relate differently to citizens and society (Lips, 2007a).

The transformational power of newly available information for government

Governments are changing as a result of using ICTs, deliberately or otherwise. These changes become particularly visible if we are deploying an informational perspective. In using this particular perspective it also becomes clear that the technical capabilities of new ICT applications do not fully determine the change outcomes. It is the people who are using newly available information who are bringing about transformation in government and governing. It is the people, therefore, not the IT systems, who will be at the basis of government and governing in the information age – of the more informationalised as well as horizontalised Government 2.0, compared to vertical Government 1.0 as we know it today (Lips, 2007a).

Transformation as a result of E-Government initiatives can be observed on the vertical axis of government, as demonstrated by research findings from E-Government case studies in our research project at the Oxford Internet Institute (Taylor et al., 2007; Lips et al., 2007), as well as on a horizontal dimension of governing, as we saw happening, for instance, in the new forms of public engagement in drafting the new New Zealand Police Act. For reasons mentioned above, such as the requirement of institutional enablement, transformation on the vertical axis may not happen that frequently or straightforwardly; nor may it necessarily achieve more *citizen-centric* government. On the horizontal dimension of governing there is not so much E-Government activity or involvement of the New Zealand government, yet.

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However, as we can gather from survey results on how, and to what extent, New Zealanders are using ICTs,[ii] the transformational potential for the New Zealand government is already profoundly present. It is up to government now to seize this potential: to 'open up' innovation on a more horizontal dimension; to include citizens and other stakeholders in E-Government initiatives to access, use and create information related to societal issues in new ways; and, therefore, to start doing things differently, outside the constraining vertical silos, instead of further optimising fixed policy solutions and prescribing those to information society citizens.

So, what are the challenges and opportunities for developing Government 2.0 in New Zealand? How can government escape the narrow, vertical silos of institution-driven business optimisation and become more horizontally focused for achieving socially enabled innovation? How can the tremendous reservoir of social capital *in* New Zealand become economic capital *for* New Zealand as well?

New Zealand public management as it is today needs to become willing to reinvent itself again in the emerging information society. It needs to open up for its *citizens* instead of its primary customers; to start an inclusive public debate about what is important for information-age government; to include citizens in the design stage of E-Government initiatives for truly achieving citizen-centric government; to connect to the information society and allow for experimenting and engaging in some controlled risk taking, to be able to facilitate non-linear thinking and therefore to make the right public decisions in establishing the new social contract with society required for the emerging information age; to bring together and assist the people who can actually

make the difference in driving ICT-enabled government performance. In doing all of this I believe that the people of New Zealand can demonstrate to the world again what *new* new public management can mean.

Moving into the information age, trying to shift from Government 1.0 to Government 2.0 will therefore require a broader and deeper understanding of transformations on the vertical axis of government as well as on the horizontal dimension of governing (Lips, 2007a). It will also require a broader and deeper engagement of public servants working on E-Government initiatives with people across government and with people living in the emerging information society. Moreover, it will require safe and controlled public spaces for critical reflection on and experimenting with how things may be done differently in government and governing in an information age.

As a source of inspiration we may want to look at the experience with the so-called 'Kafkabrigade' in the Netherlands. In trying to tackle 'wicked' problems or excessive administrative burdens from a citizen-centric point of view, the Netherlands national government has opened up a website (www.kafkabrigade.nl) where Dutch citizens can post their problems with joining up siloed government. The Dutch government has made a commitment to not only address these individual problems with 'Kafkanian' excessive administration, but also to publish the problem together with its solution on the Kafkabrigade's website. The Dutch government's main objective is to become a transformed, 'different government' for Dutch citizens.

This project demonstrates in particular the transformational power of bringing together *people*, horizontally and vertically, through enabling new ways of accessing, sharing, collecting, using and re-using information. It is the people and the way they are able to *use* the capabilities of newly available ICTs which seem to be crucial to achieving any transformation at all: a good example of what so-called 'electronic government' or 'E-Government' might entail for government in the information age.

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i 'Police wiki lets you write the law', 26 September 2007, available at www.stuff.co.nz/4215797a10.html.

ii See, for instance, Statistics New Zealand, December 2006, and the *Economist* e-Readiness rankings, 2007.

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