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Citation

Horrocks, Ivan and Budd, Leslie (2015). Into the void: a realist evaluation of the eGovernment for You (EGOV4U) project. *Evaluation*, 21(1) pp. 47–64.

URL

<https://oro.open.ac.uk/41864/>

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Into the void: a realist evaluation of the *eGovernment for You (EGOV 4U)* project

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Abstract

'e-government for You' (EGOV4U) was a European Commission (EC) funded project developed to pilot models of multi-channel, public and community e-services designed to tackle social exclusion and disadvantage through a range of initiatives delivered by five project partners from a variety of European countries. Project evaluation employed a theory driven approach and the use of mixed methods for data capture and analysis. In this paper we combine this with a form of mechanistic explanation that has been specifically developed for realist evaluation: namely the context + mechanism = outcome (CMO) approach. Our contention is that by so doing we further enhance the analytical focus and granularity of the evaluation process and thus the material we present here. This article aims to make use of previously unused material from the *EGOV4U* evaluation, and provide a realist insight into what works, for whom, in what circumstances and why.

Keywords

Realist evaluation, theory-driven evaluation, context-mechanism-outcome (CMO) configurations, e-government, e-services, community capitals, multi-channel networks

Introduction

‘*e-government for You*’ (*EGOV4U*) was a European Commission (EC) funded project that ran from 2010 until 2012. The aim of the project was to pilot models of multi-channel, public and community e-services designed to tackle social exclusion and disadvantage through a range of initiatives delivered by five project partners from a variety of European countries.

Project evaluation was undertaken by a small team from an English university, using a theory driven approach to evaluation and the use of mixed methods for data capture and analysis. The e-service initiatives developed by each partner were to be examined in relation to a common analytical framework, with the assumption being that outcomes would follow from the alignment, within each case (i.e. each initiative developed by a partner), of specific combinations of attributes. The *EGOV4U* programme/project theory identified these as a range of seven capitals (human, social, organisational, financial, infrastructural, environmental and reputational), allied to the development and operation of multi-channel (technological and organisational) networks.

It was intended that this ‘configurational’ approach to causality (Pawson, 2002a) and its findings would be documented through a series of reports employing a ‘descriptive-analytical’ method. In the event no reports of this kind were produced due

to the early termination of *EGOV4U*. However, although the descriptive-analytical method is regarded by Pawson as a ‘...giant step on...within the narrative tradition’ (2002a: 172), he notes that, ‘...it is a terribly difficult prospect to identify the potential synergy of an intervention and its circumstances on the basis of the material identified in a narrative review.’ (2002a: 177). Furthermore, the descriptions given are ‘ontologically flat’ (Sayer, 2000). In other words:

...the various ‘properties’ extracted in the review are just that – they are a standard set of observable features of a programme. Change actually takes place in an ‘ontologically deep’ social world in which the dormant capacities of individuals are awaked by new ideas, from which new ways of acting emerge.’ (2002a: 177).

Given its popularity, many might disagree with Pawson’s criticism of the descriptive-analytical method. For the purpose of this paper, however, we deem such a debate to be outside our purview. Instead we accept the realist argument that change actually takes place in an ontologically deep social world. Indeed, we would argue that our programme theory was essentially realist, which is perhaps unsurprising given that several members of the evaluation team had previously employed realist approaches such as Pawson’s, and Archer’s ‘morphogenetic approach’ (Archer, 1995), in their work (e.g. Horrocks, 2009; Walker, Martinez and Trevorrow, 2007). One of the primary objectives of this paper is, therefore, to utilise Pawson’s preferred approach to realist evaluation – context + mechanism = outcome (CMO) configurations – in combination with our programme theory to produce a realist – and thus, we hope, ontologically deep – evaluation of some aspects of the *EGOV4U* project. In so doing,

we would say that our aim is to deliver on one of the overriding concerns of realist empirical research – an account of ‘*what works for whom in what circumstances ...and why.*’ (Pawson and Manzano-Santaella, 2012: 178, original emphasis).

The paper is structured as follows. The next section contains a brief description of *EGOV4U*, followed by an outline of the programme of evaluation undertaken. The “programme theory” devised for the project is then summarised through a discussion of its two core components – capitals and multi-channel networks (M-CNs). The realist approach is then introduced, with specific attention given to a brief review of “mechanistic explanation” and the CMO approach. The remainder of the paper is devoted to applying our combined “lenses” to *EGOV4U* data and reporting some of the most significant results and conclusions.

The *EGOV4U* project

EGOV4U was an ICT Policy Support Programme (PSP) pilot project funded within the Competitiveness and Innovation Framework of the European Commission (EC).

Although funded under the EC’s *i2010* programme, *EGOV4U* was also consistent with the objectives of the successor *A Digital Agenda for Europe*, particularly in regard to combating social exclusion arising from the digital divide. The project began in September 2010 and ended in June 2012. It offered participants matched funding (50 percent EC, 50 percent each partner) up to a previously agreed maximum per partner. The anticipated contribution from the EC was nearly 2.5 million Euros.

The *EGOV4U* consortium consisted of the cities (i.e. municipalities or local governments) of Reykjavik, Iceland; Rijeka, Republic of Croatia; Dublin, Republic of Ireland; Milton Keynes, UK; and the Local Councils Association of Maltaⁱ. Partners within the consortium were funded to develop a range of ICT (information and communication technology) based initiatives designed to provide flexible, personalised, multi-channel services targeted at citizens identified as socially disadvantaged and at risk of social exclusion. From the perspective of *EGOV4U* multi-channel was defined as an approach that sought to integrate public service providers and intermediaries, including friends, family, voluntary and community organisations, into all aspects of e-service delivery. By the conclusion of the project over thirty local initiatives had been developed by partners. Examples included the provision of training in the use of ICT hardware and software, including applications such as email and Facebook, for the elderly, women and the unemployed; the development of informational web sites and information points for ethnic minorities, the disabled, the elderly and the young unemployed; and a PC loan service for the unemployed and disadvantaged.

Evaluation

A programme of impact evaluation was an integral part of *EGOV4U* from the outset. This was designed and carried out by a small team from the Open University in the UKⁱⁱ. The team were also responsible for adopting a theory driven approach and formulating the impact evaluation framework (IEF) outlined below. Ambitious in scope and scale, work fell into three phases spread over three years (see also Figure 1, below).

- define a baseline of capitals and multi-channel networks (M-CNs) for each partner and targeted excluded group.
- carry out an interim evaluation of early “successes” and “failures” in terms of the development of *EGOV4U* interventions (i.e. local projects targeted at various excluded groups). The focus of attention here would therefore be the actions of partner organisations and their outcomes *and* the development and operation of multi-channel networks. The intention was that any lessons learnt could be acted upon as the project entered its third and final year.
- final evaluation – identify and assess the uptake and impact of *EGOV4U* projects.

As we noted in the Introduction, *EGOV4U* was terminated prematurely by the EC at 21 months. The reasons for this were complex and not always entirely clear, but need not detain us here. The upshot was that all work ceased before the final impact evaluation phase had begun. However, interim evaluation was largely complete and some of the early findings had been presented to the EC at a project review meeting in Brussels in early 2012. Nevertheless, with the termination of *EGOV4U* most of this material fell into a void and remained unused until work started on this paper, where it now provides the basis for (in realist terminology) an analysis of some of the generative mechanisms, causal powers and contiguous contexts relevant to participants in a large-scale, trans-national development project.

Programme (project) theory

Today, citizens who are digitally excluded are at increased risk of social, economic and political exclusion, and many people who are currently socially excluded are also digitally excluded. The scale of the digital inclusion challenge is represented by the fact that at the time of *EGOV4U* some 150 million EU citizens (30% of the population) had not used the internet (EC, 2010a). Amongst this group would have been many who had the most to gain from digital inclusion as they often have the greatest and most complex needs. This is especially true of people over 65 years of age, people on low incomes, and people with basic or no educational qualifications. Europeans with disabilities also face barriers to participating as citizens and making effective use of government and public services.

Tackling social exclusion through the provision of better e-government and other ICT-mediated public services has been at the centre of EU policy and action in pursuit of its i2010 objectives. That commitment endures in the *Digital Agenda for Europe* where digital inclusion is a prominent goal for 2020 and where the benchmark has been set at nothing less than ‘empowerment’ and ‘emancipation’ (EC, 2010b).

An important obstacle to effective progress towards digital and social inclusion is that, beyond assumed short-term cost savings, relatively little is known about the wider scope and value of the impact achieved through the provision of ICT-mediated government and public services (van Dijk, 2010). This makes it difficult to justify significant investment in new e-services, either before or after the event. One way of

addressing these challenges is to develop an “impact evaluation framework” (IEF) that draws on methodologies, methods and measures in order to produce a calculus of net benefits, as well as identifying externalities and spillovers. Specifically, how widening access to ICT-mediated multi-channel government and public services contributes to combating social exclusion and thereby increases public value.

Capitals

The impact factors chosen for the *EGOV4U* IEF were “capitals”: a set of social and economic resources that are variants of Bourdieu’s seven forms of economic capital. By locating a portfolio of capitals as a set of impact factors within this framework, a comparative benchmark of changes in social inclusion and public value in each locale can be produced. The *EGOV4U* variants of capitals are set out in Table 1, below.

The use of capitals as the basis for impact evaluation has its origins in the literature on growth and environmental economics (e.g. Ekins, et al., 1992; Perlman, et al., 2003). Subsequently, capitals have been used at an international level by the World Bank (Grootaert, 1998) and in regional and sub-regional evaluation of regeneration and community well-being in disadvantaged neighbourhoods (e.g. Emery and Flora, 2006; Flora, 1997; Green, et al., 2005). A subset of the *EGOV4U* capitals was also used in an early evaluation of multi-channel e-government (Grimsley, et al., 2007). More recently it has underpinned the work commissioned by the EC on constructing measures of well-being drawing on the capabilities approach to resource distribution (Stiglitz, et al., 2009).

Human Capital	Comprises the knowledge, skills and expertise of individuals. It also takes into account aspects of physical and mental well-being.
Social Capital	Three forms are often distinguished: <i>Bonding</i> : characterised by strong bonds among members of a social group, organisation or community; <i>Bridging</i> : characterised by weaker, sometimes transitive ties that span communities, to connect individuals or groups to others with complementary capacities and capabilities. <i>Linking</i> : characterised by connections within a hierarchy where there are differing levels of power.
Organisational Capital	Inheres in the processes and structures, especially managerial and governance ones, within and between organisations.
Environmental Capital	Any amenity that facilitates social co-production of e-service outcomes and their subsequent social diffusion of their impacts'. Such amenities are the 'interfaces' between beneficiaries, intermediaries and the e-service network.
Infrastructural Capital	Comprises principally the computing and communications hardware and systems-level software deployed, as well as supporting resources.
Financial Capital	These are the resources that organisations, public and voluntary bodies can draw upon to further their strategic and operational objectives. In the case of the <i>EGOV4U</i> project, these resources were directed at creating and sustaining public value through combating social exclusion using e-services.
Reputational Capital	Characterised by the extent to which the public reputation of an organisation makes it more or less easy to engage beneficiaries. E-services that readily engage beneficiaries and their close intermediaries in the co-production of outcomes are likely to be more effective and more efficient.

Table 1. *EGOV4U* Community Capitals

By using changes in capitals as an input and an output of *EGOV4U* e-service projects in the various locales, one of the theoretical building blocks of the evaluation framework is utilised in an empirical setting. Each locale provides the habitus so that, in combination with the capitals, they become the substantive parts of the *EGOV4U* field. As well as acting as input resources on which project interventions can draw, these capitals also represent a situation which the intervention seeks to transform. So, for example, a particular technological intervention might seek to enhance technological

infrastructure (enhancing infrastructural capital) to support new ICT-based communication spaces (enhancing environmental capital) to develop new relationships and connections between people, groups and organisations (enhancing social capital). We will provide further examples from *EGOV4U* of the interaction between the different forms of capital and the factors that can shape the nature and scale of this interaction (i.e. contexts and mechanisms) later in this paper.

At any given time, the intersection of these capitals defines a ‘transactions space’ (drawn from the concept of ‘habitus’) that determines community capacities and capabilities and the scope for development of the community as shown in Figure 1, below. The utility of the figure is that the “petals” can be varied in size to represent the scale and scope, and/or availability, and/or alignment and/or importance of the different forms of capital over time due to the dynamic and contiguous nature of the context of projects, and how project personnel (i.e. agents) experience and act upon this.

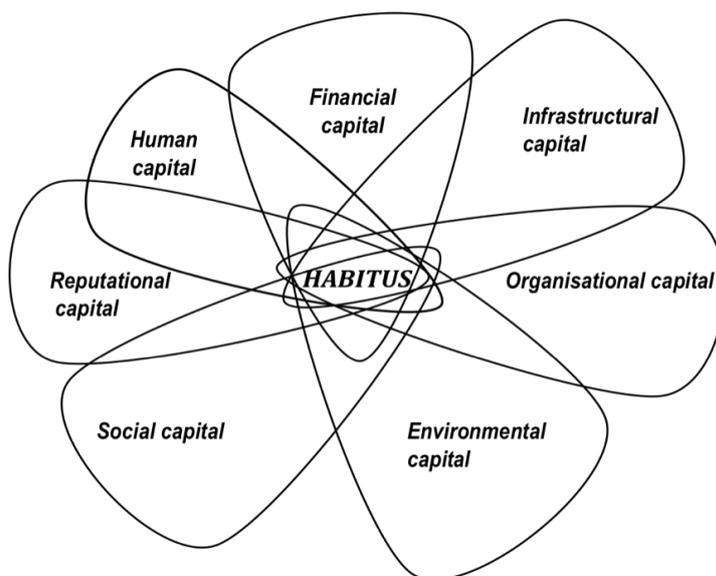


Figure 1. Habitus determined by level and alignment of community capitals (Meehan, et al. 2012)

Multi-channel networks

Within certain academic disciplines and related practitioner communities, such as computing, the term multi-channel refers to the use of combinations of ICT enabled “channels” – such as the internet, SMS text, social media and apps – to deliver various types of services. As noted above, however, the definition of multi-channel utilised for *EGOV4U* is far broader and describes an approach that sought to integrate governmental public service providers with intermediaries, including voluntary and community organisations and friends and family, into all aspects e-service delivery. Two important – and perhaps obvious – points follow from this. First, ICT multi-channels were integral to all *EGOV4U* projects. Secondly, a more accurate and thus appropriate term for the OU team’s approach to theorising and researching multi-channels would be multi-channel *networks* (M-CN). It is also important to note that the M-CN concept applies to *inter* and *intra* organisational relations between government and public service providers, such as between different governments (e.g. central, local, regional) and agencies, or between different departments or units within the same government or organisation.

Figure 2, below, illustrates the cyclical model of the relationship between the various elements and actual or potential *EGOV4U* processes in which social needs and entitlements and democratically endorsed policies to meet them are addressed by the providers of multi-channel e-service projects which directly impact immediate

beneficiaries and indirectly benefit larger target groups and communities and wider society. The direct and indirect impacts of the e-service projects result in changes to perceived needs and entitlements and revised priorities. And an interim feedback cycle is included to support the providers in optimising the impact of the e-services as the projects unfold.

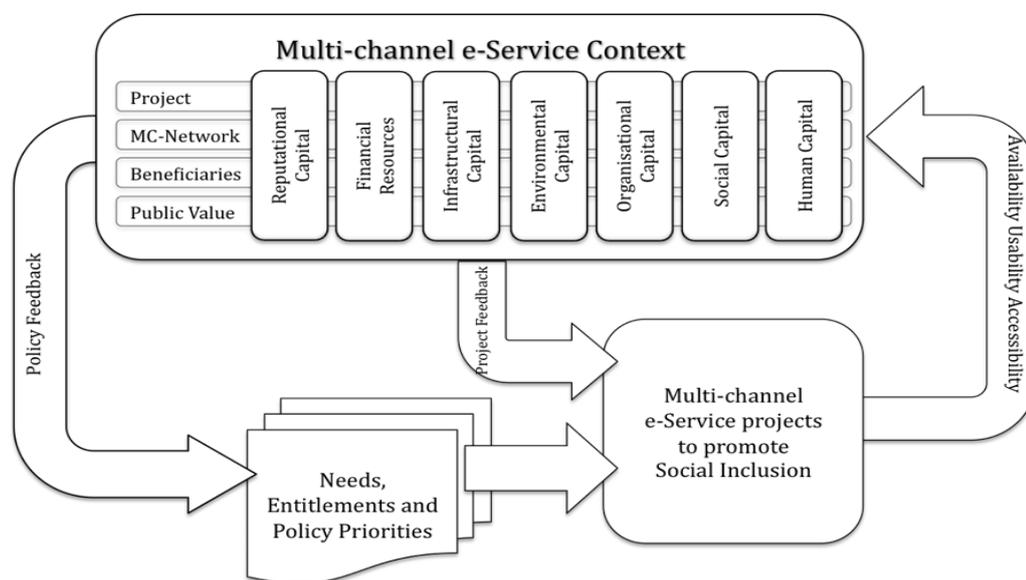


Figure 2. EGOV4U multi-channel e-service impact cycle (Meehan, et al.2012)

A realist approach

As we previously noted, according to Pawson’s critique of mainstream approaches to evidence based policy and programme level evaluation, the descriptive-analytical variant of narrative review represents a significant improvement on other variants of the narrative tradition. However, the programme or project reviews produced inevitably focus on a standard set of observable features, which means they are ontologically flat. Consequently, they are likely to conclude ‘with over contextualized recommendations.’

(Pawson, 2002a: 179). By contrast, the realist approach that Pawson and other realist evaluators and researchers promote recognises that the social world is ontologically deep, and, importantly, that transferable lessons from programmes and initiatives do not arise from generalising from empirical findings but through processes of theory building. Explanations of the effectiveness of programmes are therefore theory driven and then “tested” and refined over time (Pawson and Manzano-Santaella, 2012).

Although there are a variety of realist methodologies suitable for evaluation, of which Pawson’s and Archer’s have already been noted, a common feature of them all – and indeed of realist social theory more generally – is the prominence given to context and causal “mechanisms”, and the combination and interrelationship of the two. Put briefly, Astbury and Leeuw (2010) identify Chen and Rossi (1987) and Chen (1990) as amongst the first evaluators to introduce the term into their work. However, they take the view that it was not until the publication of Pawson and Tilley’s *Realistic Evaluation* (1997) that a detailed treatment of the concept of mechanism appeared in the discipline.

Elsewhere in the social sciences theorising and debating the existence and nature of causal mechanisms has been ongoing for some time (e.g. Archer, 1995, 2003; Bhaskar, 1978, 1979; Fleetwood and Ackroyd, 2004). Ultimately, however, it would seem that “mechanistic explanation”, as it is sometimes labelled, has broad-based appeal because it is attractive to scholars who associate their work with the scientific realist school of thought in the philosophy of science (Bennett, 2008). That said, causal mechanisms are frequently defined and used in slightly different ways. The underlying

reason for this “slipperiness” is well illustrated by New (2001: 45) when she recounts events that took place during a seminar discussing social realism and empirical research:

There followed, yet again, a lengthy discussion into the status of mechanisms. Are they emergent properties of certain relationships or social practices? Soon we had left the contextual features of tertiary education providers behind and were discussing the causal powers of the seminar, considered as a generative mechanism.

Bennett (2008: 207), meanwhile, offers a fairly comprehensive definition which certainly seems appropriate to New’s example:

...I define causal mechanisms as ultimately unobservable physical, social or psychological processes through which agents with causal capacities operate in specific contexts to transfer energy, information or matter to other entities. In so doing, the causal agent changes the affected entity’s characteristics, capacities, or propensities in ways that persist unless and until subsequent causal mechanisms act upon it.

For consistency in this paper, however, we accept Pawson’s view that ‘An intended mechanism can simply be to make available a resource the subjects do not possess and it will work if those subjects are persuaded to accept and act upon it.’ (2002b: 344). Nevertheless, whatever one’s preferred definition there is agreement that causal or generative mechanisms only operate when they are triggered – in which case they may not operate at all (Astbury and Leeuw, 2010; Pawson, 2002a, 2002b; Pawson

and Tilley, 1997). And, furthermore, that the actual effect is also dependent on the conditions and circumstances in which they are triggered – that is, as Bennett notes, above, the *specific* context .

Overall, then, we can say that causal mechanisms will be multiple in number with complex relations, interactions and outcomes, and subject to a potentially huge range of contextual features that condition their action. It is unsurprising, therefore, that at least two exponents of mechanistic explanation have described the work involved in investigating them empirically as ‘painstaking’ (Ackroyd, 2004; Horrocks, 2009). Despite this it is our contention that we can further enhance the realist credentials and analytical focus and granularity of our theory driven approach to *EGOV4U* evaluation by combining it with a form of mechanistic explanation that has been specifically developed for realist evaluation: namely the CMO approach we noted above and that Pawson has continued to develop following his earlier work with Tilley. Two related tasks can therefore be undertaken at the outset. The first is to restrict the potentially huge scope of our analysis of *EGOV4U* by adopting the suggestion that ‘The basic strategy ... is based upon following the fortunes of the dominant mechanism (M), through which it is assumed the programme works. (Pawson, 2002b: 345). The second is to specify our CMO configurations: ‘...the function of CMO configurations...is that they are rather narrow and limited hypotheses, which attempt to tease out specific causal pathways as pre-specified mechanisms acting in pre-specified contexts spill out into pre-specified and testable outcome patterns.’ (Pawson and Manzano-Santaella, 2012: 188).

EGOV4U CMO configurations

The discussion of the *EGOV4U* programme theory, above, contains the core ingredients of the initial CMO hypothesis or proposition for the project. This can be expressed as:

- The pre-specified *mechanism* (for the development and delivery of e-services targeted at citizens identified as economically/socially disadvantaged /excluded) is the idea and operationalisation of M-CNs (i.e. the dominant mechanism).
- The pre-specified *context* is the availability and appropriate levels and alignments of community capitals and access to – and the ability/willingness to utilise these – by the relevant agents.
- The pre-specified *outcomes* are:
 - i. targeted, effective and sustainable e-services for socially/economically excluded groups and individuals developed and delivered through M-CNs.
 - ii. enhanced availability, level, alignment and access to community capitals for relevant agents.

Note that we are conscious of the similarity between the second of our revised outcomes and the pre-specified context. This is due to our use of ‘enhanced’ which perhaps does not sufficiently highlight the fact that this outcome is about changing –

transforming even (although we are reluctant to use such an overused term) – the original context to a new one. Consequently this is an outcome – and an important one at that. That said, it is relevant at this point to note that the difficulty that can emerge in delineating between context and mechanism is a recognised issue, as Carter and New (2004; 14) note:

When is Context context, and when is it Mechanism? Do we allocate class structure to context, or is context the set of contingencies which affect the saliency of class-based motivations, together with other mechanisms acting at the same time, maybe in a different direction?'.

Leaving this issue aside for now, our rationale for choosing M-CNs as the dominant mechanism is straightforward. The identification of e-services that were appropriate to and *accurately* targeted at the needs of economically/socially disadvantaged /excluded people, *and* designed and delivered in such a way that they stood a good chance of being *effective* at tackling identified needs – and were *sustainable* – was beyond the capability and capacity of *EGOV4U* partners operating alone. M-CNs were therefore the necessary mechanism for meeting these objectives. Additionally, M-CNs were crucial to the development/enhancement of social and reputational capital and public value – developments which should, in turn, positively contribute to the further development and/or maintenance of M-CNs. The formation of M-CNs which included other organisations and actual or potential intermediaries and e-service users was therefore considered a fundamental feature of processes of project

development and implementation. That is, the “triggering” of this mechanism for *each* project (i.e. each e-service initiative developed by an *EGOV4U* partner) was considered essential to the success of *EGOV4U*. However, as we acknowledged above, generative mechanisms only operate when they are triggered, and there are no automatic reasons why this should happen – in which case they may not operate at all – or they may but in a more or less restricted manner. The discussion below contains examples of how this dynamic played out across *EGOV4U*.

Having identified and specified our dominant mechanism and high level CMO configuration (there will be many more, of course) our next task is to:

...sift through the mixed fortunes of the programme ...attempting to discover those contexts (C+) that have produced solid and successful outcomes (O+) from those contexts (C-) that induce failure (O-). The review process is then repeated across other initiatives featuring the same underlying mechanism with the aim of gathering together the various permutations of success and failure. In realist jargon, the aim is to differentiate and accumulate evidence of positive and negative CMO configurations.’ (Pawson, 2002b: 345).

The outcome of this exercise forms the basis of what follows. Restrictions on the length of this paper mean that our focus is on what we deem to be positive CMO configurations, although negative examples are touched on where appropriate.

What worked for whom, in what circumstances, and why: positive CMO configurations

The starting point for our ‘sift through the mixed fortunes’ of *EGOV4U* is going to be an overview of the availability, level, alignment and accessibility of capitals in the early stages of the project. As might be expected these varied from partner to partner (and over time, of course). However, a uniform feature of the public sectors of every partner country was the extent to which they had been hit by drastic post banking crisis public spending cuts and the degree to which this impacted their own “supply” of the relevant capitals (primarily financial, but also infrastructural, environmental and organisational, and in some cases reputational). Indeed, for four of the five partners, real or expected cuts in funding, services and personnel, were an ongoing feature of life for the entire period of *EGOV4U* and beyond, as austerity policies became a permanent feature of European government and politics.

Nevertheless, in theory at least, *EGOV4U* fundingⁱⁱⁱ offered participants resources that could compensate for some of these losses and thus generate or regenerate and/or align the required capitals. We might realistically assume therefore that this funding had the potential to create or support C+ contexts (i.e. levels and combinations of capitals) that were therefore more likely to facilitate lower level generative mechanisms and potential triggers for the dominant M.

Additionally, and importantly, the nature of the EC’s funding meant that each partner committed to match the resources provided by the Commission. From a relatively early point, however, it became apparent that the extent to which this

assumption held varied considerably from partner to partner and, in some cases, from context to context within a locale. What was also noticeable was that the ongoing threat of public spending cuts created a level and environment of *uncertainty* that some partners appeared unable to overcome. In one case the result was that no *EGOV4U* e-services emerged. In another progress appeared slow or non-existent. In both cases it appeared questionable as to whether the organisations were willing and/or able to commit the resources to match those provided by the EC. In short, *uncertainty* was significant in blocking the development or emergence of C+ contexts in which the factors and actions required to trigger the mechanisms necessary for the development of new e-services and MC-N's could take place.

Fortunately, despite the uncertain conditions three partners did commit fully or largely to the requirements of *EGOV4U*. The result was the triggering of the mechanisms necessary to provide agents with access to financial capital and also, although with some degree of delay, the levels and alignments of the other forms of capitals (i.e. configurations of mechanism and context) required for e-service and M-CN development.

These contrasting examples of positive and negative developments nicely illustrate Pawson's point (in his example of a mechanism, noted above) that it is not sufficient to simply make available resources agents do not possess – *the conditions have to be created for them to be accepted and used*. It is important to add that EC funding was not only significant in the way noted above, but also in creating the attitudinal, behavioural and motivational conditions for people to think about and act on

the objectives and requirements of the *EGOV4U* project as it applied in their locale and then, specifically, the development of new e-service projects targeted at identified excluded groups and the development of M-CNs. In practice the “easy” bit of this work was the technology: the development of web sites, the provision of IT equipment and software (i.e. infrastructural capital), and so on. The hard bit was MC-N development, which required key agents^{iv} to identify people elsewhere in government or public services, or in other organisations/user groups, who were receptive to co-producing/delivering services, and then develop relationships with them that could serve as the basis for developing the relevant networks. In this endeavour EC funding was again important as a mechanism and/or trigger: it could be used as an incentive to interest potential M-CN members (including potential users) in becoming involved in *EGOV4U* projects.

As we have already noted, EC funding was not uniformly contextually or mechanistically significant across *EGOV4U*, and, unfortunately, nor was it behaviourally, motivationally or ideationally so either. In some cases agents seemed unwilling or unable to think about the potential and/or actual form and function of *EGOV4U* projects in anything much broader than IT terms. Specifically, agents’ – and particularly key agents’ – willingness to open up to new ideas: the most important of which was, of course, acceptance of the M-CN concept and the supporting argument for its importance for the design and delivery of targeted, effective e-services. Consequently, what might best be called the “strength” of the behavioural/ideational trigger, and thus scope for the emergence of complimentary, lower level, mechanisms,

that might then spur on or support the emergence and development of the dominant M varied between partners and projects and over time. In some cases, this appeared to be largely due to actual or perceived issues about the practicality of the application of M-CNs, rather than rejection of the idea. But it also appeared that some agents found the concept intellectually challenging, and all the more so once it became evident that there was no single template or model for M-CNs – they were *context sensitive* (as a realist would predict).

Nevertheless, the idea gained increasing traction, particularly with two of the five partners, leading to some interesting developments. For one partner, for example, the history, structure and culture of government and public service in their particular locale meant that the most appropriate and effective initial M-CN model was one that largely focused on constructing *intra-organisational* networks. Once the value of these developments were recognised for one project they acted as a positive trigger/mechanism for other *intra-organisational* M-CNs and related development, with the intention being to “grow” these to include other organisations and users/representatives (i.e. *inter-organisational* M-CNs). This had occurred with a number of projects at the point at which *EGOV4U* was terminated, and a follow up visit to this partner some two years after the demise of the project confirmed their sustainability.

For another partner the idea of working with what are in the UK commonly referred to as voluntary organisations (i.e. third sector or not for profit organisations) turned out to be their accepted (historical) mode of operation, via funding to and regular contact with a wide range of local/neighbourhood groups of many kinds. Indeed, so

accepted was this activity that for some time the partner did not realise that this constituted an M-CN approach and did not alert evaluators to the existence of such practices, processes and structures. Once this tradition became apparent examples of these networks were mapped and their extent became clear. Unfortunately, the M-CN concept remained almost totally undeveloped for the three other partners. Some of the reasons for this have been touched on above although there are obviously others that lie outside the scope of this paper.

We have now reviewed a number of features of *EGOV4U* that constituted positive C and M configurations, as well as touching on some aspects of negative scenarios. However, before moving on to look at outcomes it is important to add a brief comment on another element of our positive configurations that the evaluation team had not expected.

Evaluation as a mechanism/trigger

Following visits by evaluators to partners' locales in the months after the project began it became apparent that in some contexts the fact that *EGOV4U* was being evaluated was also acting as a mechanism/trigger for the development of e-services and M-CNs. The OU team were familiar with the uses and misuses to which evaluation can be put (e.g. instrumental, conceptual, symbolic) as this is a topic that has been fairly widely discussed in the literature (e.g. Bamberger et al., 2006; Taylor and Balloch, 2005; Weiss 1998). However, 'process use' – '...effects that are stimulated by the process of participating in an evaluation rather than by evaluation findings' (Mark and Henry,

2004: 36) – had not been considered but transpired to be of particular relevance. As Mark and Henry note, however, ‘...missing from the evaluation use literature in general, is a detailed listing of the *mechanisms* through which evaluation may achieve influence and of the specific outcomes which would indicate influence had occurred.’ (2004: 40, original emphasis). In response they propose four kinds of ‘mechanism’ (or processes): general influence, attitudinal, motivational and behavioural. These are potentially active across (and thus analysable at) three levels: individual, interpersonal and collective. An example from *EGOV4U* illustrates this.

From the outset of the project two agents from one of the partner organisations were quicker to recognise the importance of evaluation than other participants. To some extent this was due to the fact that they noted that the EC attached particular significance to impact evaluation. There were, however, both personal and organisational reasons that appeared to be more significant. Previous (non IT) employment and educational background (social sciences) appeared to play a role. But of equal or even greater significance was an organisational culture that was relatively open and transparent, with high degrees of trust (i.e. a C+ environment), where evaluation was regarded as something to learn from – and thus provide the basis for – improvement. The result was that these individuals were quick to elaborate their own positive thoughts about the impact evaluation framework (IEF), including the M-CN approach specifically, and demonstrate a willingness to act as IEF/*EGOV4U* “champions” within their own organisation and, as time progressed, across the emergent M-CNs (as well as within the *EGOV4U* consortium more generally).

One particularly significant example of how this commitment translated into action was the organisation within a few months of the start of *EGOV4U* of a three day visit to the partner's locale by members of the OU team. This proved invaluable in two ways. It provided an opportunity to present the IEF to a range of people from across the organisation and potential M-CNs and discuss its application and potential issues. And it enabled the collection of a wide range of information/data of significance to phase one evaluation activity (e.g. the baseline report). Furthermore, within a relatively short time this led to reconsideration of policies on intra and inter organisational cooperation and partnerships, and, at the time of the termination of the project, the possibility of policy changes that recognised the value of M-CN based e-services were actively being discussed.

It should be emphasised that this was not a lone occurrence. Another IEF/project champion soon emerged within another partner. Taking their lead from the example of the first "champions", and supported by colleagues who also demonstrated support for both the IEF and *EGOV4U* generally, they too organised a very productive/informative visit by evaluators. Furthermore – and crucially – the positive attitude of the initial champions soon spread to other key agents and colleagues within their organisations, although, in truth, it was often difficult to disentangle how much of this was associated with the partner's *EGOV4U* projects (and thus EC funding) rather than evaluation specifically.

Reactions to the IEF – and thus the extent to which evaluation could be seen as a mechanism/trigger – were more mixed and ambiguous elsewhere, however. In one case

attitudes appeared to differ between older and younger members of staff. And concern about the ability of a very limited number of personnel to carry out the tasks required for the IEF (as specified in the formal *EGOV4U* agreement) also appeared to dampen the potential for influence. In another case the attitude of staff to the IEF never became clear, largely because staffing/resource issues (i.e. C- environments) appeared to restrict their ability to actively participate in the project as a whole anyway. For a third partner attitudes appeared to vary over time between positive acceptance, reluctant acceptance and hostility. This was perhaps attributable to a degree of tension between the roles of the evaluation team and this particular partner, other issues related to the management and direction of *EGOV4U*, and suspicion over – and a far less open and transparent attitude to – evaluation.

Outcomes

Several examples of positive configurations of context and mechanism have now been outlined, but one dimension of such configurations is missing, of course. In the penultimate section of this paper we therefore give brief details of some examples of positive outcomes that relate to the pre-specified outcomes of our CMO hypothesis.

Targeted and effective e-services. A positive combination of mechanisms and contexts of the type outlined above led one partners to develop M-CNs between their *EGOV4U* project office, community centres and local schools. Each of these provided a mix and match of capitals (i.e. project office: financial, organisational, human, infrastructural; community centre: organisational, environmental, human, reputational;

school: human, organisational, reputational) which together created a project that allowed school children to provide IT training to the elderly, while at the same time benefiting from the intergenerational interaction this afforded (e.g. spoken history). Another example centred on *EGOV4U* providing the financial, infrastructural and to a lesser extent, human, capital to employ and support the work of a group of unemployed youngsters (human capital) to develop a web portal (i.e. informational and interactive resource) for young people. This was developed in partnership with a city youth centre who were therefore the providers of organisational, environmental and reputational capital, as well as types of human capital such as expertise, skills and support.

A second partner with C+, M+ configurations also developed informational and interactive services (e.g. web sites and one stop shops) and skills and training opportunities, although aimed at a wider spread of targeted groups, such as women, the unemployed, the elderly and war veterans. Indeed, an IT skills project for retired citizens through which participants produced their own documentary film subsequently won a national award for innovative practice and interaction between local government and civil society. Finally – and to give an idea of the range of technologies employed for projects – it is worth adding that another partner where C+, M+ configurations were not as developed as those of the partners previously noted was nevertheless able to use their new found (and matched) financial capital to fund M-CN members to develop an *EGOV4U* TV channel as one method by which it could effectively target socially excluded groups.

(Targeted and effective e-services) developed and delivered through M-CNs. If the theory that underpins the *EGOV4U* project is correct then it should follow that the two partners that had the most positive outcomes in terms of *targeted, effective, e-services* (as opposed to simply developing an e-service) would also make most progress with the development of M-CNs (i.e. success at developing M-CNs underpins successful development of targeted, effective, e-services. M-CN is thus the ‘dominant mechanism’). Our conclusion is that this was indeed the case. However, such a brief comment does not do justice to this aspect of the two partners’ projects, nor to the amount of time and effort invested in creating M-CNs. For example, in the case of the IT, elderly and schools project the M-CN grew from one social centre and school, plus volunteers supported by staff from the centres and community service department, to a network of over 30 schools, community centres and other organisations and intermediaries supported by volunteers and city employees.

Not all M-CNs were as extensive as this, of course. Nevertheless, the growth of some form of M-CNs was a feature of all projects across these two partners, although given the context sensitive nature of each individual project it is unsurprising that the speed, scale and scope of development was by no means uniform. In many cases no M-CN existed prior to *EGOV4U*. In other cases they did but on what might best be referred to as an informal level, with their potential and importance for the development and delivery of e-services largely unrecognised. Or, to put it another way, the dominant mechanism had not been triggered.

Enhanced availability, levels, alignments and access to community capitals. The *EGOV4U* programme theory defined the features and factors of *EGOV4U* partners' projects' contexts (i.e. their habitus) as consisting of capitals, and that the intersection of these defined a transaction space that determined community capacities and capabilities. Then, in our discussion of the pre-specified outcomes of our CMO hypotheses we noted that this outcome concerns changing (or transforming) *EGOV4U* projects' contexts to "new" ones. Our concern here, therefore, is with capitals as context.

As previously noted, where EC funding was matched by a partner and/or for a project the increased financial capital triggered or acted as a mechanism for the enhanced availability, level, alignment, mix, and/or access to infrastructural, environmental, organisational, human, and, on occasion, reputational capitals. That is, a positive (C+), habitus was created for each project and on that basis it is possible to conclude that at least some degree of C+, M+ and O+ configuration was achieved – even though this outcome was restricted in the extent to which it was spread across all of the partners, projects and M-CNs of *EGOV4U*.

There is, however, another dimension to this pre-specified outcome that requires brief mention before concluding this paper: were the developments and enhancements of capitals – the "transformed" contexts – sustainable? And thus, were the e-service projects and M-CN developments also sustainable? In truth, providing an answer is difficult. This is mainly due to the early termination of *EGOV4U*. Nevertheless, on the evidence that had been collected for the interim evaluation, and through the limited communication and contact that continued during the lengthy termination period (and

from a follow up visit to one of the successful partners in mid 2014), some conclusions can be drawn. Given the “austerity” conditions that partners faced it is unsurprising that none were able to absorb the loss of EC funding. Consequently, projects that had used this to employ staff rapidly lost most or all of those employees. This meant that there were examples of projects that did not possess the means to compensate for this loss of human capital that were therefore unable to continue, or only in a severely reduced manner.

In the short term at least, other forms of capital were more sustainable and thus some C+ contexts were more robust. For example, once forms of infrastructural and environmental capital – such as IT hardware and software – have been acquired they obviously continue to exist and have use value, as do web sites and buildings. In the latter cases, however, without funds to pay building and room rentals and such like, sustainability is still clearly an open question in the longer term. Similarly, while the sustainability of forms of organisational capital, such as the processes, activities and expertise that underpin project development and operation, and networks such as M-CNs, seldom disappear overnight their longer term sustainability can be questionable. Crucially, this is more likely to be the case where projects are cut back or curtailed before they have had sufficient time to become accepted and/or embedded in relevant organisational, institutional and/or social systems. From an *EGOV4U* perspective this was likely to be all the more significant because the M-CN dimension took longer to develop but was an integral feature of the development and operation of specific e-service projects. Nevertheless, while this calls into question the sustainability of

individual e-service initiatives we do know that projects that centred on the development of informational/instructional web sites for targeted excluded groups were sufficiently well developed (and thus only requiring limited inputs of specific capitals) to be incorporated into the mainstream operations of partners. And in other cases, such as the IT clubs for the elderly, the number and commitment of those who had become involved was enough to sustain the operation of the clubs when *EGOV4U* disappeared.

Conclusion

From the outset it was evident that the world into which *EGOV4U* was born differed significantly from that which had existed when the proposal for funding from the EC had been formulated some years earlier. The effects of the banking crash, subsequent economic depression, and resulting drastic and ongoing “austerity” policies, created an extremely challenging and uncertain environment for any new government/public sector initiative. Given these grim contextual features it might be argued that the fact that the positive CMO configurations that this paper reports developed at all is unexpected. That these were, in many cases, built on or around the additional development of intra and/or inter organisational multi-channel networks with the work and resources this required is even more admirable.

Nevertheless, taken overall, the hostile environment significantly constrained the development of positive context and mechanisms and/or their triggering, and thus tended to promote or support negative configurations. Moreover – and significantly – it can be argued that the EC was not sufficiently sympathetic to the extent to which

negative local contexts were conditioning and shaping what was possible on the ground. The upshot was that achieving some of the stated objectives of *EGOV4U* – some of which would have been challenging even in the pre-crash, “good times” – to the specified timescales was always going to be difficult or impossible. Unfortunately, the early termination of the project simply meant that much that had been achieved was jeopardised or lost because it had not had sufficient time to become sustainable. It also meant that much that could have been learnt from the evaluation disappeared into a void from which it is only now – partially – emerging.

But what conclusions can we draw about the theory driven, CMO approach employed here? We believe that this has been effective in terms of providing both a framework for M-CN based e-service project development and the methodology for outcome and impact evaluation. Furthermore, by combining the two it has been possible to present a more focused and detailed explanation of the complex causal relationships that generate particular outcomes in certain contexts (and may *tend* to do so elsewhere in similar contexts) than had we not used capitals to add analytical purchase and granularity to our discussion of configurations of contexts, mechanisms and outcomes.

Also integral to the CMO/theory driven approach to evaluation is that initial programme theory should be revisited and refined where necessary, which in this case it is. Recall that the pre-specified mechanism (i.e. our dominant mechanism) was ‘the idea and operation’ of M-CN’s which, given the limits in ‘capability and capacity’ of *EGV4U* partners would act as the necessary mechanism for driving and underpinning

the development and sustainability of e-service projects and thus “deliver” on the *EGOV4U* objectives. It is clear, however, that the dominant mechanism was not M-CNs – it was actually funding from the EC *where this was allied with* resources (capitals) and other positive contextual features provided and/or created by the project’s partners. Indeed, it is clear that M-CNs either developed alongside or after e-service projects, or, in the case of one partner they were pre-existent and were opted-in. Thus they were either existing but un-triggered mechanisms, or an outcome of the development of an e-service.

Finally we recognise, of course, that our ability to fully convey the ontologically deep reality (of *EGOV4U*) that we noted out the outset of this paper was a hallmark of a realist approach to evaluation, such as CMO, has been limited. All we can say in mitigation is that had we attempted to delve deeper into even one example of e-services and/or M-CNs that we note here we would likely more than exhaust the entire word limit for this paper. Instead we took the view that we would focus less deeply but therefore more widely on CMO configurations. Even then, much more could be said about the multiple mechanisms, contexts and outcomes of a substantial project such as *EGOV4U*, and the structured and shaped situations/contexts through which the people involved sought to exercise their reflexive powers and interpretive freedom. Nevertheless, in overall terms we believe we have succeeded in our primary aim, which was to make use of previously unused material from the *EGOV4U* evaluation, and provide a realist insight into what works, for whom, in what circumstances, and why.

Acknowledgements

The authors would like to thank three anonymous referees for their helpful comments on an earlier draft of this paper. We would also like to thank our former OU colleague and fellow member of the *EGOV4U* evaluation team, Anthony Meehan, for advice on some aspects of this paper and the extensive work he did on the original impact evaluation framework.

Funding

This work was supported by the European Commission [grant number 250509].

A follow up research visit to Reykjavik in June 2014 was funded by the Open University's Innovation, Knowledge and Development Research Centre.

Notes

- i. A commercial partner was also involved but not in the development and delivery of e-services.
- ii. www.egov4u.open.ac.uk
- iii. EC funding covered direct costs – personnel, travel and related subsistence; the cost of durable equipment and consumables and supplies; and indirect costs – commonly referred to as overheads.
- iv. ‘key agent’ refers to an individual from one of the partner organisations with particular responsibilities for the *EGOV4U* project (e.g. project leader or administrator, technical officer, advisor, etc).

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