

**The application of scenario planning to internally generated e-government
futures**

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Abstract

This paper contributes to critical discussion on the contribution of external agents to change and development programs. We present empirical evidence of externally facilitated change to mindsets and patterns of behavior within local government through use of a scenario planning based approach. The project examined the impact of information and communications technologies (ICT) on government departments/agencies. Our aim was to facilitate the organizational actors conduct of investigation of the 'limits of the possible' for a range of plausible futures, and determination of strategic responses to these. Participants used their own current knowledge and understanding as a basis for development, with the introduction of external 'expertise' to challenge their thinking and to expand their understanding. Following this, we facilitated the participants' elucidation of key uncertainties on the future, exploration of the relationships between them and possible outcomes. The participants then constructed scenarios that outlined four possible and plausible futures. The specific intent was that the scenarios must hold explicit meaning *for the participants*, and enable them to identify implications of each possible future in relation to structure and service requirements. These were used to inform analysis of current structure, service, etc. We argue that the external facilitation of internal generation of knowledge, understanding and meaning, and of exploration of the limits of the possible for the future, is a valuable tool for decision support and comprehending strategic choices. It enables organizational actors to make sense of complexities and ambiguities that they face in their day-to-day business within a wider business framework.

Keywords:- e-government, scenarios, futures

In this paper, we seek to contribute to discussion on the role and contribution of external agents to origination and design of organizational change. We describe and discuss our use of scenario planning as a tool for facilitating change, with reference to the limited amount of critical academic literature on scenario planning, and with specific critical comparison with decision analysis and unstructured group process. We do this within the context of government, in the debate on the future role of government and the means by which it might deliver value-based services to its citizenry through the application of new information and communications technologies (ICT). Based upon our own experience, and by reference to the literature, we discuss external facilitation of change programs such that they have meaning for, and become embedded in the consciousness and sub-consciousness of organizational actors.

We present evidence of empirical study of our work with a local government organization in the UK (here referred to as Northshire Council) in which our role was that of facilitators of investigation by the elected members and salaried officers of the Council, and members of their partner organizations from the public and not-for-profit sectors. The project was set up in response to a call for submissions for funding from a section of central government under a program entitled 'Modernizing Government', concerned with the application of new ICT in support of 'joined up government', with the aim of making government more efficient and effective. At the time of our intervention, Northshire Council had been invited to revise their first round submission for a second round, but had received critical feedback on the lack of clear strategic direction and deliverables within their submission. The primary method applied in the intervention was one of scenario planning (van der Heijden, 1996), with the key aim that the Council members and officers should develop their own broad understanding of the range of

possibilities for the future environment in which they may find themselves operating. Also, that their strategic thinking should be outward focused, towards the community and its desires, aspirations, service needs, etc., rather than inward focused on the Council's own intentions, capabilities, and service offerings.

Whilst the investigation, analysis and critical appraisal were undertaken by the group actors themselves, they received input on the possibilities of technology, governance and other areas from 'remarkable people' (van der Heijden, 1996), selected not for their knowledge of Northshire, and not to offer any 'solutions'. Rather, they offered general insights into the 'limits of the possible' for futures in and around their area of expertise in order to broaden the range of thinking of the internal participants.

As external agents in the design of Northshire Council's change agenda, our aims were fivefold, seeking to facilitate the members and officers' own:-

- elucidation of key uncertainties on the future
- investigation of the 'limits of the possible'
- exploration of the relationships between these and possible outcomes
- articulation of a range of plausible futures
- determination of strategic responses

In so doing, we sought to combine the positive elements of intellectual ownership by the Council through personal involvement, along with added surprise and learning value through external input (Schoemaker, 1995).

Our study indicates that the creation of ‘short histories of the future’ by the group through their own creative and critical engagement with their developing understanding, was a powerful force for change in the mindset and intent of the Council. It enabled members and officers to comprehend the strategic options that were open to them in terms of the impact that these would have on the community, its responses, and, ultimately, on themselves.

Whilst acknowledging the context-specific nature of the work, and its current limitations in terms of elapsed time, we seek to draw out some general points of interest for discussion of the nature of change, the role of external agents, and the application of scenario planning.

Change and the public sector

Since the 1980’s, the UK has seen a continuous paradigm shift in public sector management, under both Conservative and Labour governments, from the ‘traditional’ model of public sector, characterized by lack of market incentives and higher levels of bureaucratic rule and regulation than in private sector organizations (Meyer, 1982). Successive governments have sought to establish an approach and a new management ethos that places emphasis on responsiveness to consumers, improved performance, and revenue generation in line with the new public management vocabulary (Maor, 1999) and the drive towards debureaucratization (Savoie, 1994). At the beginning of this period of change, the relationship of public/private sector management might have been viewed as dichotomous in terms of concern for, and comfort with stability/change, cost/revenue, bureaucracy/entrepreneurship (Rainey, 1983). Research in the 1990’s showed that this was no longer the case (Bozeman and Bretschneider, 1994), and that the

value systems of the public sector was migrating towards that of the private sector. Much of this change towards a private sector ethos has been driven through the involvement of the private sector, partly through programs of privatization of public sector services and utilities, and partly through the involvement of private sector management consultants as change agents in the public sector. Where the external agents' role is that of deliverer of solutions to organizational problems, it might be characterized as 'heroic' (Kanter, 1989), providing deliverance that could not be internally conceived. In meeting the aims of the Modernizing Government program, to apply new ICT, there is strong temptation to move directly to seeking external solutions, since leading edge thinking on the new technologies obviously lies within the private sector. Northshire Council themselves and we as external agents were not, however, open to consideration of externally generated solutions through application of the 'expert systems' model of decision making (Cairns and Beech, 1999). Rather, all parties sought to enable internally generated solutions based upon a 'knowledge-centered' (Cairns and Beech, 1999) approach and consideration of the widest possible range of options.

Scenarios and the search for unity

Many of the models for organizational change that might be considered applicable to a program of public/private sector convergence are embedded in modernist thinking, in search of unitary forms of organization. Such unifying approaches are presented in much of the managerial literature, as in the search for coherence (Pettigrew and Whipp, 1991), shared vision (Collins and Porras, 1996; Wack, 1985), strong and unifying leadership (Bass, 1985) and an integrated organizational culture (Martin, 1992). In its execution in the practice arena, such rationalist

thinking undertaken in search of the *causa finalis* (Nietzsche, 1968) - the final cause or purpose of human endeavor – is frequently based upon selection and exclusion. Rather than promoting divergence and exploration of multiple possible causal relationships, organizational actors seek the most plausible and acceptable explanation to any problem. They seek firstly to dispel any notions of the unfamiliar, the un-experienced, the uncomfortable (Nietzsche, 1994), then to select only what is new and comfortable; those things for which they can create false similarities (Nietzsche, 1986) with what is already known and familiar. In reality, however, it *is* often the alien and the un-experienced that will have greatest impact upon organizations, such as the reality that there *is* a world market for more than 5 computers, that there *is* a reason for individuals to have a computer in their home (Schoemaker, 1995)!

In contrast to the rationalist, modernist and reductive approach, the nihilist postmodernist may support the conclusion that all cause is deception, all effects ‘super-added’ by human interpretation (Nietzsche, 1968). Here, there is no unity, no single reality, and no causal relationship in human action. Whilst we argue against the concept of a single reality and unitary thinking, we consider that fragmented nihilist approaches are of little significance to those in the practice arena - those seeking meaning from, and for their day-to-day activities. For them, what is required is a way of getting to grips with the *causa efficiens* (Nietzsche, 1968) - the *efficient* cause – that might offer meaningful interpretation of managerial thinking/acting. In our scenario based approach, we argue for thinking which is divergent and non-linear, not seeking reduction of complexity and ambiguity to a false unity, as in the averaging approach to synthesizing divergent opinions in decision analysis (Wright and Goodwin, 1999). Neither do we seek abandonment of all notion of cause and effect, no matter how perceptual. Rather, we seek

integration of diverse and contradictory concepts into a range of plausible scenario story lines; to seek the *causae efficiens* – the efficient *causes* – that will enable individuals and organizations to be proactively prepared for any reasonably possible and plausible future.

Whereas decision analysis will apply the probability laws in order to police and to devalue the ‘conjunction fallacies’ (Tversky and Kahneman, 1983) by which humans make sense of the events and decisions that they face, scenario planning applies plausibility perceptions to use these fallacies. This is not done, as Mintzberg suggests (Hyde, 1999) in order that ‘by speculating upon a variety (of futures), you might just hit upon the right one’, but to frame the limits of possibility for a range of plausible futures. This is done with the belief that, barring the unknowable happening, the ‘real’ future will fall somewhere within the established frame. We believe that it is better to be proactively prepared for any reasonable eventuality than to be even the fastest at reacting to emergent reality.

In accepting that much of what underpins scenarios is assumption, we see this as a strength, rather than as the weakness claimed by Mintzberg (Hyde, 1999). We see scenarios as a tool to facilitate understanding of the multiple ‘realities’ that are generated by actors in their own individual and shared context(s) of thinking/acting, and to investigate the reasoning and logic that underpins these socially constructed realities (Berger and Luckman, 1966). We argue for proactive internal ‘problem seeking’ and conceptualization of options as a means of overcoming adoption of the ‘defensive routines’ (Argyris, 1985) that stand in the way of implementation of externally generated solutions. Also, we argue for the application of the scenario approach as an iterative and proactive form of vigilance in the search for future problems, as proactive antidote

to the negative outcomes of unstructured group process or unsuccessful decision analysis, characterized by ‘defensive avoidance’ or ‘hyper-vigilance’ (Janis and Mann, 1977).

Method

In adopting an organization-centered approach to problem framing, analysis and strategic thinking, we consider it necessary that the exercise be firmly embedded in the organization members’ own context of thinking/acting. However, our experience is that the pre-existent boundaries of that context may result in initial definition of a narrow set of problem defining parameters by the organization. These can place inhibiting constraints upon action, framing the problem at a largely operational level rather than enabling wide ranging, innovative and challenging investigation at the conceptual level. For example, in decision analysis practice there is nothing inherent in the methodology to challenge the decision-makers’ *a priori* worldview of the course of unfolding events in the external world. It is against this worldview that decision options are generated and evaluated in decision analysis practice (Wright and Goodwin, 1999). We seek to broaden the scope of the organizational members’ thinking, re-framing their worldview, whilst ensuring that it remains *their* worldview, rather than that of the external change agents. Throughout the intervention process, therefore, our concentration is upon listening rather than speaking, facilitating rather than directing, questioning rather than answering.

In seeking to facilitate the organizational participants’ explorations of the limits of the possible, the major element of the method applied to the empirical study was that of scenario planning

(Wack, 1985; Schwartz, 1991; Schoemaker and van der Heijden, 1992; Schoemaker, 1995; van der Heijden, 1996). By this method, we sought to elicit the participants' – both elected members and officers from Northshire, and members of their partner organizations from the public and not for profit sectors – perceptions of the critical uncertainties (Schoemaker, 1995) that the Council might face in the next 5 years, and to explore their impact upon society and the Council's operations within a range of differentiated, but plausible futures. The use of scenarios enables management of complexity and ambiguity without reduction and elimination.

In order to determine a meaningful organizational context for the scenario exercise, we first conducted a series of 25 in-depth, semi-structured but open-ended interviews with 4 elected members and 11 senior officers of Northshire Council, and with 10 members of partner organizations. Each of these interviews lasted between 1.5 and 2 hours, and was designed to facilitate the interviewees thinking firstly about the broadest of issues in the external macro-environment, with a concentration upon those factors that were considered to be of major relevance to the future sphere of operations of the Council. Then, discussion was moved towards consideration of the internal, micro-environmental factors that related to these macro-elements. Thereafter, interviewees were invited to consider the recent history of the Council, and how the current status of the micro-environment was derived. Finally, the interview was thrown open to the interviewees to add any further material they considered relevant to the study. By this means, we sought to inspire the interviewees thinking firstly about the future of the world beyond the Council, then on how this would impact upon the Council, and finally to consider the Council's own legacy systems to the present time. From this process, we derived insights into the issues that were seen to be of concern to all the interviewees in relation to the future of Northshire

Council. Also, we were able to attune the participants' thinking to the concept of looking from the outside in, and from the future back to the present; a major element of the scenario thinking process.

We sought to share the content of the interviews with all participants, but with the content being non-attributable to individuals, and with some structure that would assist assimilation. The interview transcript report was structured around a number of general but common themes, determined by us but derived directly from the content of the interviewees' own words. This report of the interview content was then used as an agenda for a workshop, working with the Council's own 'scenario team', consisting of 6 members derived of the elected members and senior officers. Our role in the workshop was to facilitate the critical engagement of the team with the interview material, to enable and support their own 'strategic conversation' (van der Heijden, 1996) in order to seek to identify the critical uncertainties faced by the Council over the next 5 years, from which to derive the framework for the scenario construction. This framework was therefore derived of the participants' own thinking on issues, and their personal involvement in the process. This was done in order that they might have intellectual ownership of, and belief in the credibility of the content of the resultant scenarios (Schoemaker, 1995). At the same time, our role as facilitators was designed to minimize the risk of organizational bias and suppression of new ideas, and to maximize learning opportunities from innovative external inputs (Schoemaker, 1995).

Having derived a scenario framework from the set of 25 interviews, but working with the smaller group of 6 in order to concentrate upon critical discussion of underlying themes, issues,

uncertainties, etc., we facilitated a second, scenario building workshop with the original 25 interviewees. Return to the larger group here was intended to maximize involvement in development and ownership of the scenarios. In line with most scenario planning approaches (Schwartz, 1991; Schoemaker and van der Heijden, 1992; Schoemaker, 1995; van der Heijden, 1996) the process involved initial investigation of the driving forces that will impact upon the future, those with outcomes that are largely predetermined and those that are uncertain. In the former category fall areas of demographics – most of the Councils’ future ‘customers’ may already be identified and understood – and areas of technological development. In to the latter category fall areas of technology adoption and application, and matters of partisan political dogma. For those driving forces that are considered uncertain in outcome, the participants define in a few words the two polar extreme outcomes that are considered feasible within the scenario timeframe. Since the determination of driving forces and outcomes in a large scale scenario exercise can lead to the surfacing of hundreds of ideas, the next stage is one, not of selection of ideas, but of clustering and determining relatedness, in order to bring manageability without reduction and elimination. It is with the cluster headings – the encapsulating titles that describe a discrete, although not independent, and complex sub-set of the worldview – that the participants initially work in determining the overall scenario outlines.

The particular scenario approach adopted (van der Heijden, 1996) differs from the ‘simple scenario’ approach (Schoemaker, 1995) in that it does not seek to combine different driving force, or groups of driving forces outcomes in terms of positive, negative or stable combinations relative to the current strategic position. In the adopted approach, the structure of the scenarios within the general framework of investigation is based upon identification of the 2 critical

uncertainty areas, that exist independently of each other, and that are considered to have the greatest perceived impact upon the organization. These are then set out in the four possible combinations – in simplistic terms, best/best, worst/worst, best/worst and worst/best - in order to establish a scenario matrix. The participants then seek to place all the driving force outcomes into one or more of the scenario outlines, based upon consideration of the internal logic, the causal and chronological relationships, and the conjunction fallacies (Tversky and Kahneman, 1983) that link them. The range of plausible outcomes that derives from this approach enables exploration of the combination of positive and negative forces in order to produce entirely plausible, but unexpected outcomes.

Findings from the scenario exercise

From the initial set of 25 in-depth interviews, we determined a vast range of issues that concerned the individuals. We first sought to present the results of these interviews back to the participants, with anonymity and set within a general structure of recurring themes identified by ourselves, but derived entirely from the transcript material. These themes were the external environment, the role of the Council, values of Northshire Council, forms of organization, the change project itself, issues relevant to other agencies, and funding. This structure around themes was intended to bring manageability to the data, to seek a focus upon the critical uncertainties, but without reduction and elimination of issues deemed to be relevant through inclusion in the interview discussion. The interview content was thus reported back to the interviewees and, having obtained confirmation that the content of the interview record was recognized by the participants as making sense in their own context of thinking/acting, the first

workshop was held with the Council's own scenario team. This was used as a forum for determining a scenario framework to serve as an agenda for a subsequent scenario workshop with the larger group of members, officers, and partner organization representatives who had participated in the interviews. This scenario framework was derived of 9 uncertainty clusters agreed by the participants in this first workshop, that included:-

- *partner agendas* – whether partner organizations shared the values of the Council, the commitment to involvement, willingness to share resources, etc.
- *information mapping and understanding the basics of the business* – how do current systems relate to knowledge management, can duplicate systems be integrated/eliminated, etc.
- *public ownership* – is the commitment to involvement a solution or an ideology, will the public be with the Council, how does it relate to cultures of youth and the underclasses, will participation be hijacked by pressure groups, etc.
- *central agencies as help or hindrance* – what is the real agenda of central government, does system centralization conflict with democracy, etc.
- also, what will be the *opportunities and constraints offered by new technologies*, what *resource implications* are there for the change process, what will be the *macro-economic factors* of relevance, how will *change be managed*, and what will be the new *organizational design* required to implement joined up government in the future.

From these nine clusters, a 'broad canvas' for the subsequent scenario workshop was defined around four themes of:-

- technology possibilities
- citizen views of technology solutions, and societal acceptance/rejection
- knowledge management, joined up government, and complexity

- governance and democracy in the future

Prior to the scenario workshop, further input to the participants' expanding frame of thinking was gained by the invitation of a small number of external experts – 'remarkable people' (van der Heijden, 1996) – to present views on the 'limits of the possible' for the future of information and communications technologies (ICT), their application to public sector management, and the nature of governance and society. The scenario workshop was structured around our facilitation of the participants' initial identification of the widest possible range of driving forces for change over the next 5 years. This was an open-ended process, in that no time limit was placed upon it, and it was conducted initially in round robin format, such that all 25 members provided input in turn until each ran out of ideas. Over a period of some 90 minutes, over 120 driving forces were identified by individuals and clarified by the group in terms of the plausible polar outcomes for the Council's operations. These were recorded on magnetic hexagons on large wall-mounted boards, so that the entire group could share the content, and the process of manipulation of ideas without intervention by us, or without any individual member of the group constraining the thinking according to their own agenda. The driving forces were clustered by the participants as a group through a process of manipulation of the hexagons, accompanied by open discussion, argument, negotiation and compromise, again with the aims of investigating perceived causal relationships, and obtaining a manageable number of concepts without reduction. The resulting nine clusters were given encapsulating titles by the participants. These cluster headings were then ranked firstly according to the relative impact they were considered likely to have on the Council, and the perceived relative degree of uncertainty as to what the outcomes of this impact might be over the next 5 years.

In accordance with the adopted scenario approach (van der Heijden, 1996), the scenario dimensions were derived of those two cluster groupings that, whilst not directly driving each other, were considered to have the combination of greatest impact, with highest degree of uncertainty as to the outcomes. These cluster groupings related to the fields of:-

- the democratic process – primarily concerned with the balance between central and local government, and the effect of the balance struck between these upon delivery of services at the local level by the Council
- value creation – concerned with the speed of development of new technologies, the capacity for individuals and organizations to internalize these, and the their use to become more productive

In relation to the democratic process, the participants saw uncertainty as to whether decision making would rest with individuals and with businesses, with minimum intervention from government and the public sector agencies, or whether society would move towards a collectivism in which community issues would come to the fore. In relation to value creation from new technologies, there was uncertainty as to whether technology would be adapted to human needs, unleashing a new productivity through unimpeded uptake, or whether technology uptake would be subject to institutional constraints. The latter situation would see the development of a division between those who have access to, and skills to use technologies, and those who have either not got access to, or cannot use them. In both cases, the impact of the outcomes was considered to have a major impact upon the Council.

Initial construction of the scenario outlines was derived from consideration of the descriptors that might be applied to the ‘world’ that was defined by each of the four possible combinations of outcomes from these two determining cluster groupings. The participants then allocated all of the previously identified driving force outcomes to one or more of the scenarios, in order to start building up a rich, and internally consistent picture of each of four possible futures. After this stage had been reached by the full group, four sub-groups then each worked with one member of the facilitation team in order to build up one of the scenarios. The smaller groups considered the relationships between different factors in terms of perceived cause and effect, and chronology. They considered the starting point of the story in relation to aspects of the present, the key events – decisions, developments, exercises of power by key stakeholders, etc. – that would determine and describe its unfolding, and the end state that would define it. These ‘short histories of the future’ were designed, constructed, named and made sense of by the participants themselves, not by us, and were therefore the wholly owned intellectual property of the Council and its partners. They were not represented as ‘good’ or ‘bad’ worlds, nor were they presented as more or less possible than each other. All four were seen as entirely plausible developments that were worthy of consideration in planning the way forward towards modernizing and joining up government through the adoption of new technologies. However, each presented different challenges and different opportunities to the Council.

The scenario titles and key identifiers are as follows:-

- *Forward to the Past* – in this future, centralization dominates over dispersed and local governance, and central government runs the show. There are real barriers to change, with restricted funding for local government, mismatches in the geographical boundaries of

Councils in relation to areas of wealth and employment, and a reluctance to share accountability across Councils and agencies. The adoption of new technologies and the resultant productivity improvement in the public sector has come at the expense of local Councils, with a drive towards centralization at government level, and to central control or privatization of services at the local level. This future may mark the beginning of the end for local government.

- *Free Enterprise* – Here, there is emancipation of the public, and a drive away from the paternalism of the old-style bureaucratic governance. The ‘customer rules’ and market forces are delivering – but only for some. For those with access to, and the capability to use new technologies, there is a public free spirit, with ‘24x7’ access to the ‘new public sector trade’. Whilst there are drives towards achieving economies of scale, there is challenge to the concept of ‘one size fits all’, with a demand for premium services from those who can afford to pay extra for them. There is, however, serious polarization in society, with exclusion from the new society of the underclass who can either ill-afford, or who are ill-equipped to use the emerging technologies
- *People’s Kailyard*¹ - In this scenario, there is increasing interest in the democratic process, but primarily at a superficial level, rather than with the fundamentals. As such, there is a tendency towards seeking the ‘quick fixes’ to immediate problems, with fear of adverse publicity and media reaction to any perceived failure. New technologies open up new channels of communication from the citizenry, and there is greater social inclusion at the superficial level, with public consultation processes, but a resultant move towards concentration upon dealing with complaints, rather than with serving needs and improving

services. As such, there is reinforcement of top-down and fragmented government, lack of real public accountability, and an ever-increasing gap between the reality and potential for service effectiveness

- *Technology Serves* – Here, there is a combination of technology facilitating increased access by the citizenry and development of a proactive form of civic governance that is based upon meaningful dialogue between citizens and government. Elected members and their officers are enabled to act at the local level for all members of society, including the ‘invisibles’ and the ‘excluded’. National government settles the subsidiarity debate in favor of local democracy, and supports trailblazing projects that demonstrate the competence of civic governance, for example in the field of social housing. Here, the new technologies facilitate a new form of joined up government from the bottom up.

Each of the sub-groups presented their scenario outline to the full participant group, with the key differences between each clearly differentiating the possibilities for a range of plausible futures.

In ‘Forward to the Past’, there is seen a downward spiral, a vicious circle towards greater centralization and limited, or no local government in the future. In ‘Free Enterprise’, local government is unencumbered by bureaucracy, but there is delivery of ‘premium services’ for those who can/will pay, but with increased polarization, disenfranchisement and fall-out in society. In the ‘People’s Kailyard’, there is mediocrity and, surrounded by legislation, cross organizational boundary problems, non-standard protocols, etc., there is much talk of change, but a continuous finding of new problems to talk about, so no change. In ‘Technology Serves’, there

¹ ‘Kailyard’ is an old Scots term for ‘cabbage patch’, and was selected by the participants in the sub-group to describe a level of minimum subsistence for members of society, despite vast amounts of expended energy.

is a future in which the group's common aspirations, visions and desires for change are seen to be enabled.

Through discussion of the underlying trends and basic driving forces that underpinned each of the scenarios, the Council themselves derived an initial set of key implications that were seen to be fundamental to their immediate thinking/acting, if they were to be effective in exerting whatever influence they might reasonably have over the reality of the future that will unfold over the next 5 years. These were:-

- Northshire Council must lead from the front, with bold steps in developing an integrated and inclusive approach to technological innovation. The dangers of the small step, and short-term approach were highlighted in the Kailyard scenario.
- The Council must promote democracy in action, by making the new technologies serve the people, and by using technology to develop 'civic governance'. They must bring local government closer to the community level, developing high levels of ability to listen and respond to citizen wants and needs. They must develop transparency and accountability in their deeds and actions, with policies that are meaningful to the public.
- New technologies must be used to demonstrate the competence of local government, achieving public confidence and support through the provision of responsive, community oriented services, more customized services whilst, at the same time, applying the technologies to support inclusion and to reduce inequalities.
- Northshire Council must use the new technologies in order to promote itself as the 'home for sustainable value creation'.

- The Council must proactively promote and lobby for settlement of the subsidiarity debate in favor of governance at the local level.
- Finally, in developing short-term solutions to immediate problems, the Council must watch out that long-term aspirations remain the guiding light.

From the outcomes of the scenario project, and the resultant debate within Northshire Council on the above implications, there have been strategic decisions taken in support of supporting local democracy in action, promoting inclusion, quality and best value, and sustainability across the Council's operations, fostering the concept of joined-up government, and seeking to foster the relationship with central government, of whatever political persuasion, whilst promoting the case for Northshire in the widest political and business arenas. In addition to these strategic decisions, there has been operational action in seeking to establish a web-based knowledge and transaction system that will promote a citizen and business focused interface between new integrated service demand and provision by the Council and its partners, whether based upon integrated systems, or a 'virtual integration' of legacy systems.

Discussion

In the project undertaken with Northshire Council, participants undertook a 10-week strategic conversation process. They worked primarily with their own current knowledge, but were supported and facilitated in challenging their thinking by introduction of external 'expertise', and by open, non-hierarchical debate in a non-threatening environment in which innovation, novelty - even the absurd - were seen as acceptable. Whilst the majority of the data and knowledge input

to the scenario process was existent within the organization prior to the project, and had informed the first round submission for the Modernizing Government funding, it was held in discrete chunks, lacking the overall integration that would enable exploration of the widest range of possible and plausible outcomes. Overcoming the lack of integrated yet divergent thinking was the prime aim of the project, helping organizational members to make sense of the complexities and ambiguities of their multiple reality worldviews. The participants developed scenarios that held explicit meaning for them, at the individual and group levels, and identified implications in relation to *their* understanding of Northshire Council's structure and service requirements. They then used their own surfaced implications of these scenarios to inform analysis of current structure and service and to devise strategic options for further investigation and implementation. These informed the Council's revised, and successful second round submission for Modernizing Government funding.

In the project, the consideration of outcomes beyond those predicated on current options, in a proactive manner and without threat of immediate negative kickback, was highlighted in the response to the People's Kailyard scenario. Whilst all four scenarios were seen as plausible by the participants, and all contained some predetermined elements and some consideration of outcomes of uncertainties, it was in the Kailyard scenario that the plausibility of future outcomes caused critical reappraisal of current option preferences. There was deep initial shock within the group to the realization that this scenario outlined a world in which the best intention of the Council, in seeking to push forward with quick steps to ITC implementation and increasing citizen access, might prove counterproductive in the longer term. They saw a situation in which the Council invested in ITC in the immediate future, whilst the citizenry and business increased

their skills and access to technology. These effects combined such that ease of access and free communication enabled the public and business to bombard the Council with inquiries, problems, calls for service, to which they were unable to respond, due to constraints placed upon them by a powerful central government. The notion that the Council's actions would become more and more PR-oriented, with quick fixes to the superficial aspects of service and long-term deterioration at a fundamental level, was seen as highly plausible. It was also seen as very likely if decisions on rapid uptake of ITC were taken in isolation of wider and longer-term strategic thinking. Within a matter of weeks following the scenario workshop, 'the Kailyard' had become a widely discussed concept within the Council offices. There was evidence of change to mindsets and patterns of behavior that led to reconsideration of current ITC strategy, and to commitment to the project for appraisal of citizen and business focused ITC, with consideration of the systems for associated service delivery.

Contrary to 'standard' applications of decision analysis (Wright and Goodwin, 1999), participants in the scenario project were able to consider outcomes to driving forces in the environment prior to considering the strategic options for action that may be open to them. In the standard approach, options for action are determined first, and considered outcomes are predicated upon the selected options – 'If we do this, what might happen?' (Wright and Goodwin, 1999). We would argue that the adopted approach opened up the participants' thinking to diverge beyond their previous conceptualizations of the 'limits of the possible', but at a stage when they are able to take proactive vigilant action. That is to say, they were able to reconsider and redesign strategies in response to threats perceived at a theoretical level, before they were manifested in reality. Where outcomes considered are limited by options that are constructed

early on in the process, such as in decision analysis, reactive response to the process induced, increased threat of unfavorable futures is likely to be defensive avoidance of the decision dilemma (Janis and Mann, 1977).

It must be pointed out, however, that where organizations, or powerful individuals within them, are committed to strategies that are not seen to be robust within particular scenarios, and cannot be easily or conveniently changed, the results of the scenario analysis may not be the same as we experienced. Hodgkinson and Wright (1997) discuss a failed scenario intervention, in which defensive avoidance results from the realization that there is no realistic hope to find an alternative option to current action.

Conclusions

We accept the context-specific nature of our work, with an organization stimulated by self-interest in acquiring central government funding, and with a history of non-partisan and citizen oriented governance. Also, we recognize that Northshire Council's entry into this intervention process was reactive, as a result of the failure of their first stage bid for Modernizing Government funding. Finally, we acknowledge that the true findings and relevance of the project require appraisal over the time scale of the scenarios – to the year 2005. However, we consider that the following interim conclusions contribute to the debate on organizational change, particularly in the changing environment of the public sector as it seeks to apply private sector values, measures, and tools for management.

We would argue that the outcomes of this intervention are indicative of changed mindsets and behaviors derived specifically from the nature of the self-directed learning process of scenario development, albeit within an organization that was already committed to change, and to internally generated solutions to externally focused problems. We consider, however, that this commitment lacked an effective vehicle for investigation and understanding of the range of complexities and ambiguities that were to be found within the driving forces for change. The scenario process enabled the participants to surface and share their individual perceptions, beliefs, values, concerns etc., to structure these thematically, without reduction and exclusion, and to make different sets of sense of the ambiguities, the conflicts and contradictions, developing a shared framework within which to see different worldviews.

The role of external agents as facilitators of process which, whilst new to them, involves the internal participants in self-managed critical reflection, learning and sense-making, is in contrast to the 'normal' management consultancy role. In the facilitation of internally generated, knowledge-focused change (Cairns and Beech, 1999) the role of the external agent is not conceived as heroic (Kanter, 1989) deliverer of expert solutions based upon reduction and striving for unity. Rather, it is seen as provider of input to actor generated solutions, supporter of divergent thinking, and presenter of a wider range of limits of possibility to those internal organizational actors. The combination of external expertise at a general and theoretical level, combined with internal expertise at the particular and operational level, enabled conception and consideration of options that were novel, innovative, yet grounded in the 'reality' of Northshire. In this respect, we support the notion of the internal/external input as a 'both/and' option (Hyde, 1999), rather than as an 'either/or' consideration as discussed by Schoemaker (1995). The

combination of internal, organization driven investigation and idea generation supports generation of meaning and intellectual ownership, but is combined with external inspirational conceptualizations based upon surprise and novelty.

Our case analysis supports the use of scenario planning as a tool for establishing the limits of possibility and plausibility for ‘the future’, understanding the perceived causal relationships, and exploring the limits of the critical uncertainties within the external environment *prior* to determination of options. As such, scenario planning is a process-oriented tool that promotes dissenting opinion, encourages divergent thinking, and does not apply selection and exclusion in search of a *causa finalis* (Nietzsche, 1968); a unity of beliefs and values within the organization. Rather it provides a means of generating shared, causally-generated understanding of plausible futures, some of which may be unfavorable to the organization and its current strategic intent. These may, however, be used to generate shared action in support of the *causa efficiens* (Nietzsche, 1968) of organizational intent, without development of shared vision (Collins and Porras, 1996), organizational coherence (Pettigrew and Whipp, 1991), or any other form of single reality unity. This maintenance of divergence of opinion, belief, perception within an overall unifying frame of limits of possibility is in contrast to the reductionist unity of decision analysis, and the disunity - possibly fragmented nihilism - of unstructured group decision making.

Insert Figure 1 about here.

We support the use of scenario planning as a means of proactive problem-seeking vigilance. However, we believe that only where the scenario planning process becomes institutionalized as

an iterative tool for setting agendas for strategic conversation (van der Heijden, 1996), and for ‘wind-tunneling’ the resultant scenario options, can the conflict between scenario outcomes and existent strategies be eliminated. There is little chance of scenarios serving a useful function within a reactionary organization, with management that is locked into existent strategies by their own intellectual ownership (Wright and Hodgkinson, 1997). Here, breaking the mold is the initial challenge.

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	Decision Analysis	Scenario Planning	Unstructured Group Process
Future orientation	Decision analysis is conventionally undertaken within a singular general frame of the future	Multiple frames of the future are constructed during the process	Usually a single general frame of the future is unquestioned
Structuring of judgmental inputs	Quantitative decomposition into probabilities, payoffs and decision trees	Qualitative decomposition into critical uncertainties and trends. An emphasis on understanding causality	Unstructured
Information orientation	Fresh information may be sought if the analysis indicates that a recommended decision is sensitive to small changes in judgmental inputs	“remarkable people” systematically provide insight on issues of critical uncertainty	Unstructured
Process orientation	Focus on combining divergent opinions by averaging and reduction	Dissenting opinion is given “airtime”, preserved, and combined with the opinions of others, whilst maintaining divergence	Dissenting opinion may emerge but will be evaluated in an unstructured way
Action orientation	The result of the analysis is a single recommended decision for subsequent implementation	The result is shared understanding of causally-determined futures that can galvanize managerial action to avoid unfavorable futures or facilitate the occurrence of favorable ones	Unstructured.

Table 1: Organizational Interventions and Organizational Outcomes