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Introduction

This paper examines the effects on perceived quality and political feasibility of strategy making outcomes within an organization when inclusive design principles are incorporated into the design of a strategy making process. Our examination draws on findings from a collaborative action research project in which, through participatory research methods (Burns et al., 2012), we worked with a wide range of stakeholders in an organization to redesign and execute a strategy making process in line with inclusive design principles. The outcomes of our study indicate that inclusive design theory provides a valuable lens through which to reimagine strategy making theory, challenging dominant perspectives of how, and with whom, strategy might be made effectively.

Strategy making is typically regarded as being the remit of those at the top of an organization’s hierarchy (Ackermann and Eden, 2011b; Carter et al., 2008; Donaldson, 1972; Eisenhardt, 1989; Meijboom and Obel, 2007). From this view, strategy making draws on the calculations and views of the senior team to set the long term direction for an organization and formulate plans for how best to act on behalf of owners or shareholders (Casadesus-Masanell and Ricart, 2010; Nutt, 1986, 1987; Siegel, 2009).

As the domain of senior managers, strategy making tends to be removed from the hurly-burly of daily activity, operating across functional domains to formulate big picture responses to shifting environments (Harris, 2000; Sodhi, 2003). As the world is recognised as being hugely complex, ever shifting and challenging (Jantsch, 1968), strategy making methods grounded in abstract analysis have become ever more complex and nuanced in response (e.g. Giles, 1991; Nutt, 1989, 1998, 1999).

This configuration of strategy making, by design, produces outputs that are exclusive and excluding; exclusive in the sense that the strategy making process is conducted by a narrow range of potential users of the strategy – typically the top leaders or managers in the organization - and therefore incorporates a limited range of interests and insights which others are expected to follow (Suominen and Mantere, 2010; Vaara, 2010; Westley, 1990); and excluding in that by adopting a narrow, technologically sophisticated set of methods such as complex quantitative analytical tools and business-level balanced scorecard systems, those without understanding of very particular intellectual approaches continue to be excluded ongoing from understanding why strategy has been made in a certain way (Mantere and Vaara, 2008; Mintzberg, 1994).

This approach to strategy making is problematic. Strategy making processes that exclusively represent and impose the views of a dominant order invite resistance and subversion through the daily practice of creative and capable strategy ‘users’ at all levels of the organization (Cutcher, 2009; De Certeau, 1988; Schein, 1979; Suominen and Mantere, 2010). Without incorporating mechanisms into the design of the strategy making process that engender political feasibility – the capacity to engage and mobilise others to commit to a certain course of action - any strategy making process outputs are unlikely to be realised as envisaged (Eden and Ackermann, 2001; Gray and Ariss, 1985; Guth and MacMillan, 1986; Kim and Mauborgne, 2005).

Furthermore, where strategy making is conducted exclusively by managers removed from the direct operation, interpreting second-hand data and formulating grand plans based on a few perspectives, the outputs created may well lack realism and implementation potential (Angell, 1990; Eisenhardt, 1990; Isenberg, 1987; Mintzberg, 1994). In other words rich
sources of insight from a broad range of stakeholders are ignored by design. Choices for how the strategy making process is designed can unintentionally diminish the potential that realistic, engaging, and implementable strategic outputs will be created. This shifts the onus for realising strategic success onto the ingenuity and creativity of operational management teams to locally counter mistakes in strategy making and plug the gap between idealised strategic outputs and organizational reality on a daily basis (Ghemawat and Levinthal, 2008; Scott, 1998; Suominen and Mantere, 2010).

In this paper we examine the possibilities of countering design exclusion in the strategy making process through the application of inclusive design principles. Originating in the architectural and product design academic and practitioner communities (Coleman et al., 2003), inclusive design is a philosophical approach that promotes user centred, human oriented design practice towards delivering outcomes that are accessible to as wide a range of the potential user population as possible. Driven partly by legislative changes and partly by shifting demographics, inclusive design is a response from these communities to an increasing need to create built environments and to design products and services effectively and efficiently that meet a broader range of abilities in user populations beyond the requirements of ‘typical users’.

Over a 10 month action research project incorporating participatory methods, we applied inclusive design principles to a strategy making process for C-Change Scotland, a supported living organization that works with and for adults with learning difficulties and/or mental health issues. Our point of departure was the practice oriented strategy making process framework advocated by Ackerman and Eden (2011a) that exhibits several process design characteristics – user-centric, iterative, participative and prototype-mediated approaches – that are consistent with inclusive design principles.

Countering hierarchical exclusion, our approach to strategy making process design extended Ackermann and Eden’s (2011a) framework by detailing a strategy making process that involved all levels of the organization in an equal way rather than holding that “the Operating Managers should make strategy,” (Eden and Ackermann, 2001, p. 120). And countering methodological exclusion, by applying Keates and Clarkson’s (2003) inclusive design framework (‘the knowledge loop’ – explained in the background literature section), we iteratively adjusted the specific methods deployed in the making strategy process framework (Ackerman and Eden, 2011a) towards meeting the needs of as broad a range of strategy users as possible within the case organization.

We contribute to knowledge in several ways. Firstly the application of inclusive design to a key business process such as strategy making offers insights as to how work can be organized and structured in organizations in more hierarchically and methodologically inclusive ways. In the domain of strategy, we propose that adopting an inclusive design approach can enhance the political feasibility of strategy making process outcomes, and offer arguments in support of further researching and investing in inclusive approaches that can be tested with different strategy making techniques in different settings. We also contribute insights to the debate about how an emerging inclusivity imperative might represent a performance improvement opportunity, and through action research provide an angle for further research towards how organizational gains might be realized by adopting inclusive design principles.

The paper is structured as follows. Firstly we explain what we mean by inclusive design from the literature and introduce our interpretation of the strategy making process as
advocated by Ackerman and Eden (2011a). We then described the practical work undertaken through an action research approach. We examine the adjustments made and discuss the revised process as enacted through strategy process and inclusive design concepts. We conclude by reviewing the theoretical and practical implications that the application of inclusive design principles to the design of strategy making processes might offer.

**Background Literature**

**Inclusive Design – Overview**

Inclusive design is a user-centric philosophy for approaching the design of products, services, environments and systems that addresses the needs of the widest possible audience (Coleman et al., 2003; Keates and Clarkson, 2003a; McAdams and Kostovich, 2011; Vavik and Keitsch, 2010).

Inclusive design philosophy is grounded in the ‘social model’ of disability - a view that disability results from design choices that create unnecessary limitations on the engagement of users with a system (Coleman et al., 2003; Keates and Clarkson, 2003a; Ormerod, 2005). As such, inclusive design creates product, services and systems that do not discriminate amongst users based on ability, instead creating designs based on exactly what users can do rather than what users cannot do (Baskinger, 2008; Clarkson et al., 2003b; Keates, 2007; McAdams and Kostovich, 2011).

Inclusive design aims to create outputs that enable social inclusion, enhanced human performance and access to goods and services by the widest possible range of users (Hochheiser and Lazar, 2007; Steinfeld and Maisel, 2012; Vavik and Keitsch, 2010). A concern for inclusive design is the avoidance of negative impacts that exclusion by design can generate, such as hardship, stigmatisation, frustration and alienation (Baskinger, 2008; Coleman et al., 2003; Scottish Executive, 2006).

**Applied Inclusive Design**

Outputs from inclusive design will be light touch in that, without compromising core functionality, they will tend towards simplicity, clarity and broad appeal (Pullin, 2003). This may mean inclusive designs offer multimodal features providing narrow utility, such as the human machine interface in an elevator having audio, visual and braille equivalent options, rather than having multiple features with single access options (Baskinger, 2008; Huppert, 2003; Warburton, 2003). In these ways, inclusive design practices are the antithesis of traditional design practices in which designers, separated and remote from users, make decisions based on abstract, reductionist conceptions of functional needs (Imrie and Hall, 2001; Steinfeld and Maisel, 2012).

A key initial task towards achieving these outcomes is a definition and specification of the boundaries and abilities of a user population, rather than just identifying the needs of a ‘typical’ user (Dewsbury et al., 2004; Keates, 2007; Keates and Clarkson, 2003a; Steinfeld and Maisel, 2012; van Rooij, 2012). Thereafter, inclusive design methodologies involve continuous, iterative participative processes of engagement with users (Scottish Executive, 2006; Keates and Clarkson, 2003a; Vavik and Keitsch, 2010). From the earliest stages possible, information about users is sought from source and interaction between rough and ready prototypes, designers and a broad range of users drives progress towards final designs. This emphasis on feedback in practice results in users and their situated abilities driving the

An applied framework of inclusive design is Keates and Clarkson’s (2003, pp.76-83) knowledge loop [included as reviewer reference in appendix], an iterative processual method responding to traditional gaps in design processes between designers and users, and users and developing designs. By emphasising user involvement at all stages of the design process, the needs, capabilities and aspirations of the full user population can be understood and responded to by the design team through closely coupled, prototype-mediated activities (Keates and Clarkson, 2003a, 2003b)

When undertaking inclusive design, at least one cycle of the knowledge loop should be applied at each step of whichever broader design process is being followed to maintain high levels of user involvement and vital user feedback for designers (Keates, 2007; Keates and Clarkson, 2003a). The specific mechanisms of feedback – interviews, observations, trials, questionnaires, expert appraisal etc. should be selected according to situational needs (Cardoso et al., 2003; Keates, 2007).

The success of the application of inclusive design principles can be evaluated in terms of the social and practical acceptability of design outcomes for users (Keates, 2007). Social acceptability concerns the extent to which a user wants to engage with a design outcome, on the basis that it is trustworthy and meets their expectations and aspirations (Dewsbury, et al., 2004; Keates, 2007). Practical Acceptability is about the extent to which design outputs are judged by users to be worthwhile adopting given the utility on offer, usability, cost effectiveness and compatibility with their life. (Dewsbury et al., 2004; Keates, 2007; Keates and Clarkson, 2003a).

Rationale for adopting inclusive design principles

Increasingly, anti-disability discrimination legislation such as the disability discrimination act in the UK (DDA, 2005) is placing an onus on organizations to create not only products and services that are non-discriminatory, but also work environments and business processes that are inclusive for employees (British Standards Institute, 2005; Casserley and Ormerod, 2003; Keates, 2007; Ormerod, 2005; Scottish Executive, 2006; Steinfeld and Maisel, 2012). As “companies that do not comply will find themselves on the wrong side of expensive litigation” (Keates and Clarkson, 2003a, p iii), there is therefore strong cost-avoidance and reputation-maintenance based arguments for organizations to embrace inclusive design practices.

The economic case is further strengthened by a need to respond to global demographic trends, in particular an increasing average age of employee and consumer populations across nations (Macdonald, 2003; van Rooij, 2012; Vavik and Keitsch, 2010). Through inclusive design of work environments and products and services, organizations might position themselves to capitalise on shifts in the needs of user populations rather than be undermined by them. In addressing the complex, nuanced design specifications of a user population, inclusive design practices tend to encourage deep reflection on user needs and innovative responses to complex user requirements (Baskinger, 2008; Lebbon and Coleman, 2003; Warburton, 2003) As a consequence, accessible design outcomes produced from an inclusive process are often ‘good’ designs that will attract high calibre employees in the case of work systems or create profitable brand-led market offerings (Keates, 2007; Warburton, 2003).
Although still largely untapped, inclusive design approaches might offer avenues for improved organizational performance. Given the dominance of ‘typical’ design approaches, inclusive design might foster competitive advantage through asymmetry of organizational processes, products and services in comparison to competition (Miller, 2003). Furthermore, by enhancing social acceptability of outcomes, inclusive design might generate reputational gains and the accumulation of goodwill from stakeholders, improve relations with staff, and creating value-based profit potential (Coleman et al., 2003; Coy, 2003; British Standards Institute, 2005; Keates, 2007).

There is also a self-interest argument for promoting adoption of inclusive design as whether through congenital, accidental or age-related impacts on our abilities, sooner or later we will all face product, services or systems that disable us through exclusionary designs (Baskinger, 2008; Bontoft and Pullin, 2003; Coleman et al., 2003; Doke, 2005; Keates and Clarkson, 2003a).

**The Strategy Making Process**

In this study, we apply inclusive design to a baseline strategy making process reflecting the making strategy framework as advocated by Ackermann and Eden (2011a).

Adopting a view that strategy concerns “agreeing where to focus energy, cash, effort and emotion for long term sustainable success”, Ackermann and Eden (2011a, p.5) propose a framework for effective strategy making based on facilitated socio-political processes of negotiation (c.f. (Ackermann et al., 2005; Eden and Ackermann, 1998, 2001)). This process should draw on the wisdom, experience and intuition of a range of stakeholders within an organization - typically the full management team – and through facilitated conversations consensus is sought about where priorities should be set (Ackermann and Eden, 2011b,c). In doing so, the methodology of strategy making advocated by Ackerman and Eden (2011a) seeks to build consensus in a realistic way about where efforts and energies should be directed, and where they should not, in the organization’s future.

Two concepts underpinning Ackerman and Eden’s making strategy arguments are the notions of procedural justice – the perceived fairness of a process - and procedural rationality – that the steps in the process are perceived as sensible. Procedural justice, a term coined by Thibault and Walker (1975), refers to the perceived justice of the process being followed and matters as much, if not more to participants, than the outcome which is produced (Kim and Mauborgne, 1996, 2005). In the context of making strategy, Ackermann and Eden (2011a) argue that paying attention to procedural justice is vital in order to build political feasibility of the outcomes agreed. Without a sense of procedural justice, participants in the process will be more likely to resist or subvert efforts towards delivering the agreed strategy, thus thwarting implementation (Eden and Ackermann, 2001; Guth and MacMillan, 1986). However, even if they do not agree with a decision, participants in a process may still commit support if they believe outcomes have been determined by a fair process (Eden and Ackermann, 2001; Kim and Mauborgne, 2005).

Procedural rationality is arguably an extension of procedural justice, referring to the degree to which participants can cognitively commit to outcomes agreed because they perceive “that the procedure itself is the outcome of a publicly stated reasoning” (Eden and Ackermann, 1998) (p55). Perceptions of procedural rationality are likely to follow when “the procedures used for strategy making make sense in themselves – they are coherent, follow a series of steps each step is itself understood (not opaque) and relates to the prior and future steps” (Eden and Ackermann, 1998, p55).
With a clear focus on maintaining procedural justice and rationality, Ackermann and Eden (2011a) propose a methodology for facilitating negotiated conversations between participants supported by causal mapping methods typically, but not necessarily, through group decision support software such as Decision Explorer or Group Explorer (c.f. (Ackermann et al., 2010; Ackermann and Eden, 2001, 2005; Shaw et al., 2003).

**Shared Characteristics of the Making Strategy and Inclusive Design Frameworks**

The strategy making workshop ‘scripts’ described by Ackermann and Eden (2011a) were selected as a point of departure as the characteristics of these authors’ strategy making process framework – user-centric, iterative, participative and prototype-mediated approaches – provided clear anchor points into inclusive design theory as described in table 1 below.

[Insert Table 1 here]

However, as will be explained in the subsequent sections, our process design innovates around the strategy making framework as we redefine the users of strategy as all staff and service-users within C-Change, rather than operating/functional managers. This required us to draw on inclusive design principles in order to shape a functional process that was accessible and usable to as many individuals within this population as possible. The following section explains how this work was undertaken within our case organization.

**Case Context**

The application of inclusive design principles to the making strategy process was undertaken with C-Change Scotland, a supported living organization that works with and for adults with learning difficulties and/or mental health issues. Based in Glasgow, at the time of the research C-Change employed 200 staff, and had provided services for 50 individuals over the preceding 12 years.

In April 2012, an informal conversation between senior managers from C-Change and the academic team identified a shared interest in better understanding inclusive practice as applied to strategy work. The Chief Executive Officer (CEO) was seeking to revise C-Change’s strategy making approach on the basis of perceived poor engagement from staff and service users with the current organizational strategy as created by the senior managers and the board; the academic team had an interest in theorizing how strategy making process design might be made more inclusive.

Through broader discussions with colleagues within C-Change and the University, a collaborative research programme was agreed to undertake a strategy making process founded on inclusive design principles. The programme as enacted is summarised in table 2. For the C-Change management team, the programme was undertaken with the intention of generating a more engaging strategy output whilst providing opportunities to promote inclusivity to internal and external audiences, a key aim for the organization. For the academic team, the programme was expected to provide an opportunity to participate in innovating around the making strategy process by influencing the design and observing events as they unfolded. This work differed from consultancy in that it was conducted *pro bono* with the explicit aim of creating new knowledge about the possibilities of inclusive strategy making process design.

[Insert Table 2 Here]
An action research approach was adopted for this project, treating all involved as equal partners in the research process (Stringer, 2007) whilst working towards “research output results from an involvement with members of an organization over a matter which is of genuine concern to them” (Eden and Huxham, 1996, p.75). Action research was appropriate given the processual nature of the phenomenon under investigation and the attempt at convergent application of interlocking strategy making and inclusive design frameworks in practice. In a manner akin to the research cycle outlined by Coughlan and Coghlan (2002), drawing on Keates and Clarkson’s (2003) inclusive design knowledge loop our research programme progressed in an iterative fashion as illustrated in Figure 1.

[Insert Figure 1 Here]

The knowledge loop mechanism also operationalized the research partners’ aim to adopt participatory methods in order to give voice to those marginalised by previous versions of the strategy making process (Burns et al., 2012). Participation from across organizational stakeholders was mobilized by the knowledge loop in two main ways. Firstly, the strategy process design was steered by a design team comprised of academic staff and C-Change stakeholders including the CEO, a functional manager, an external consultant, front line staff and service users. Hence, a wide range of stakeholders were involved in shaping process design steps for consideration by the wider organization.

Secondly, as described below, the strategy user population was re-defined as all internal stakeholders rather than the management team. This meant that tentative strategy making process step designs were tested through demonstration sessions and pilot work with a broad range of organizational stakeholders, including all hierarchical levels of employees and service users. Feedback from these strategy ‘users’ gathered in or post session (through informal interviews, phone calls, emails and hand written notes according to participant preferences) was logged and used to provide corrective adjustments towards making process step design changes inclusive.

Adjustments to the Strategy Making Process Design

During the initial informal discussion, the first proposed strategy making process design was to run a management team strategy making session integrating ‘issue management’ and ‘purpose’ scripts (described in full in chapters 3-6 of Ackermann and Eden (2011a)) using Decision Explorer (DE) software support for causal mapping. Over the course of the research project, the strategy making process design was adjusted as illustrated below in table 3 through iterative application of the knowledge loop. In the following section, we describe the reasoning behind each of these adjustments as we sought to counter hierarchical and methodological sources of exclusion in the strategy making process.

[Insert Table 3 Here]

Redefinition of strategy ‘users’ – Involvement of ‘users’

In line with an inclusive design approach (Keates and Clarkson, 2003a), the first decision of the design team concerned defining the boundaries of the user population and setting a design specification based on the associated range of abilities. For the strategy making process in C-Change, the user population was defined as all internal organizational stakeholders – broadening from board and management team to also include front line managers, service providers and service users.
A commitment to participate was unanimously endorsed through feedback channels from all internal stakeholder groups. As well as shaping all subsequent design choices, this initial boundary decision increased the time and resource commitment required for the strategy process design – effectively stretching the anticipated timescale from 2 months to 10 months and adding c. £2000 of incurred cost as well as staff time commitment. However this decision was framed in design team discussions as an investment in creating perceptions of a fairer process that might foster engagement, tap expertise across the whole organization and thus improving the ‘quality’ of strategy created.

Accessibility of instructions

As the design process progressed, a regular source of adjustment feedback related to the format and language of communications. For example, figure 2 below shows an extract from a participant information communication drafted at the start of the process.

[Insert Figure 2 Here]

The format of this document imposed a limitation on accessibility as the small, serif-based font, used unthinkingly as a default setting on the word processing programme, was unreadable for some of the user population. Furthermore, the language used pre-supposed an understanding of strategy and research ‘technology’ and was off-putting to many of those that could otherwise ably contribute to the strategy process (akin to the language ‘mystification’ barriers reported by Mantere and Vaara, 2008). Based on this user feedback, the document was therefore restyled as per figure 3 (the revised equivalent of the content of figure 2) by adjusting font size and formatting in line with accessibility requirements, adding images to aid comprehension and focussing on communicating a core message (Huppert, 2003).

[Insert Figure 3 Here]

This adjustment met the needs of the broader population and was repeated in subsequent communications. Where documents were complex (for example, explaining new procedures relating to the strategy process), the authors were challenged to clarify the underlying messages and augment text with visual images to communicate in a multimodal way (Baskinger, 2008; Petrie et al., 2005; van Rooij, 2012).

This adjustment retained the required level of functionality in the communication aspects of the process whilst increasing the accessibility and usability of the content. The consequence of this adjustment was thus a more practically acceptable process. Furthermore, the ‘typical’ strategy users (ie. top management, board) reported an enhanced sense of engagement with the communication material, suggesting an increase in the social acceptability of this redesigned aspect of the process.

Accessibility and usability of strategy prototyping mechanism

The initial plan had been to use DE causal mapping as the sole transitional object and mediating prototype in the workshop sessions (an example of a DE map from one of the sessions is shown in figure 4).

[Insert Figure 4 Here]

However, feedback from a demonstration session of DE suggested that whilst the DE causal map had clear value in mediating the conversation, it was likely to be excluding to many
members of the user population on cognitive and concentration parameters. To avoid compromising the functional benefits and analytical insights provided by DE, it was decided that additional modality, a regular feature of inclusive design practice (Baskinger, 2008; Huppert, 2003; Mueller, 2003), was required for the mediating prototype. Therefore, the use of DE in the facilitated conversation workshops was augmented by multi-modal (summary text and representative image) graphic maps of participant ideas created live, in session, by a graphic artist (see figure 5 for the visual display corresponding to the DE map in figure 4).

[Insert Figure 5 Here]

In the workshop sessions, both the DE and visual map were displayed side by side and updated live as the conversation unfolded. This approach did incur additional cost and required two facilitators (graphic artist and DE operator) to be present at each session. However, running the two prototyping approaches in parallel provided several benefits. Practical and social acceptability were aided by the visual display, as it was accessible and usable by all participants, and the visually appealing nature of the final product – made available for others to see after the first workshop - resulted in a vocalized interest in being involved in the process across stakeholder groups within the organization. The DE map captured causal influences between ideas in a way that was not possible via the graphic map, thus preserving functionality as periodic analysis in DE of the patterns in the conversation aided the ‘facilitated negotiation’ process. Both maps captured participant views as they were offered, creating strong perceptions of a fair and open process, and the transparent use of analysis helped participants understand why the collective conversation was directed in different ways.

**Location of workshop sessions**

A further adjustment to the workshop session plan related to the location. Instead of hosting events at C-Change as initially planned, user engagement was fostered by running the peer-group workshops at the University. Describing the design feedback from the improvement council (a group of C-Change’s service users):

“All of the participants had at some point been assigned the label of having behaviour that challenged services and without exception the participants in this strategic mapping work had left school without qualifications. When asked where they would like to undertake this work the participants chose to attend the university. This was a very powerful statement of inclusion by participants and by the University”.

CEO

This redesign had an enhancing effect on the social acceptability of the process, generating a willingness to participate across organizational levels in what was regarded as a novel and prestigious event. Aside from user-engagement benefits, following Nunn et al. (2009), this relocation provided an ‘inclusive’ narrative for broader promotion and marketing within and outwith C-Change and the University of the collaborative project, further enhancing the practical acceptability of the process.

**Accessibility of collective feedback mechanisms**

When designing a final review session through which all users would be invited to express their feedback on the strategy options identified through the workshops, the concern of the
design team was that technological methods would represent an intimidating, and thus excluding, interface for the large sections of the strategy user population that did not use computers on a regular basis (c.f. (Hochheiser and Lazar, 2007)). The intention at the start of the overall programme had been to use group decision support software during a final voting session. However, after feedback, the procedure adopted involved casting anonymous votes to indicate preferences from a range of options by manually applying a limited number of sticky dots to paper based, visual displays (see figure 6).

[Insert Figure 6 Here]

Allowing ‘drop-in’ participation, this exercise was organized at C-Change’s premises with an open invite to all organizational stakeholders to attend and participate. It had been considered to host the event at the university but to align with the daily schedules of as many of the user population as possible – and thus to preserve practical acceptability – the meeting areas of C-Change’s headquarters were used. To enhance a sense of openness, the visual maps and DE content created during the peer group sessions was put on display for all to review alongside the dot voting displays.

After the final review session, the results of the voting were translated into a proposed set of statements of strategic intent around which there were broad consensus. As advocated by Mintzberg (1994) this document constituted a broad strategy vision, rather than a specific plan of action and was circulated in a multimodal format for comment and review before being actioned through the organization’s annual planning, resource allocation and budgeting process. A sample extract of this document is presented in figure 7.

[Insert Figure 7 Here]

This final review approach was an attempt to embrace the inclusive design principles of simplicity and clarity without compromising core functionality (Baskinger, 2008). The rejection of more technologically sophisticated options also echoed Ackermann and Eden’s (1994, 2001) argument against an unreflexive commitment to technological methods for group decision support systems when participants are more comfortable with manual methods. Feedback about the final review session suggested that the inclusive and open approach adopted was fair and made sense, and the ‘dot’ method proved effective in capturing participant views. A further improvement was suggested post-process of aligning the final voting sessions with one of the quarterly all-staff meetings, in order to make it easier for the full user population to participate. This recommendation was logged for inclusion in design of future iterations of the strategy making process in order to further enhance practical acceptability.

**Participant perspectives – Countering Exclusion by Design**

Over the course of the action research programme, inclusive design principles were adopted in an attempt to effect useful changes to the design of the strategy making process within C-Change. Representative quotations of participant views of the impacts realised through the inclusive design approach, organized by the four process concepts of procedural justice, procedural rationality, social acceptability and practical acceptability, are illustrated in Table 4. Based on the feedback gathered during and after the process design and execution, the following sections summarise the impacts realised by the adjustments made.

[Insert Table 4 Here]

*Countering Hierarchical Exclusion*
In comparison to previous strategy making work in C-Change and the initial plan for the programme, the final strategy making process was overtly more hierarchically inclusive. By design, the invitation to participate in the process was open to all interested parties from across the total population of C-Change’s internal stakeholders and service users.

This was highly impactful in terms of the perceived fairness of the process. A recurring theme in participant feedback was that the revised process design had enabled participants’ ‘voices’ to be heard. It was perceived that every member of the organization had been given the opportunity to participate in creating a poly-vocal strategic output, as per the intent of participatory methods (Burns et al., 2012).

As a result of having sought data at different hierarchical levels, adjustments were also perceived across the user population as realising a more rational, sensible process. Effectively, as the process outputs were based on a more complete set of data than previous strategy making efforts they were perceived as being more relevant to the full range of localised needs across the strategy ‘user’ population.

By not excluding potential strategy users based on hierarchical position and by having every participant involved in the same way, the stigmatization of groups as ‘non-strategic’ was avoided, thus increasing the social acceptability of the process and the political feasibility of outputs agreed.

In terms of practical acceptability, expanding the number of participants involved in the process resulted in it taking longer to achieve strategy outcomes, as a 2 month plan stretched to 10 months. However, the previous mode of strategy making had not achieved sufficient levels of political feasibility and engagement – as Rock (1987, p.67) comments “unless it's executed, [strategy] remains only a good idea.” When a longer term perspective is adopted for cost-benefit analysis, an argument can be made for increased practical acceptability through an inclusive strategy making process design as whilst there is a greater immediate cost incurred, there are proportionately greater benefits in utility delivered.

**Countering Exclusionary Methods**

The adjustments previously described had also attempted to make the methods of the strategy making process more inclusive by design. A key moment in this aspect of the application of inclusive design principles was an adjustment of the specification for usability, accessibility and functionality of the strategy making process to accommodate a broad range of strategy ‘users’ in the organization beyond the senior management team.

Designing methods to correspond to this more exacting specification removed barriers that would have prevented otherwise capable individuals from participating in the strategy making process. This contributed to a sense of fairness at an individual level and by avoiding frustration associated with participation performance barriers, individuals could choose the level to which they engaged with the strategy making process.

The inclusive methods adopted had an improving effect on procedural rationality also. The open nature of the process, in which simplicity, transparency and clarity of method were emphasised in design, meant that the progression through steps of the overall process was well understood, and insight as to how final outputs were identified was widespread.

The beneficiaries of the revised methods were not just those that had previously been marginalised in the strategy making process. Rather, the social acceptability of the process was enhanced for all users in the target population – including the board members and
management team considered as the ‘target’ users for previous versions of the strategy making process. The multi-modal communication methods adopted were more visually appealing, and provided options for engaging with the material that allowed individuals to better understand the meaning of ideas.

As with hierarchical exclusion, the inclusive redesign of methods incurred a cost. However, by providing methods that allowed all to contribute, barriers to idea collection were greatly reduced and the pool of options from which the final outputs were identified was broadened and deepened. A further dimension of utility for the management team funding the exercise was also added in terms of generating marketing material for the promotion of inclusivity. Thus, the short-term financial cost was more than outweighed by the gains in utility offered by the redesigned methods.

**Theoretical Implications**

Feedback from participants suggested that the inclusive design based modifications had improved commitment to the strategy process and its outcomes across the broadly defined ‘user’ population, enabled by perceptions of the exercise of procedural justice and rationality, creating richer and more relevant strategic outputs in the process.

The revised strategy making process design was characterised by improved usability and accessibility for all involved and not just those that had previously been marginalised, and was regarded throughout the organization as a set of activities with which people wanted to be involved. As the ownership of and commitment to the process across the user population was strengthened, the incorporation of inclusive design principles appeared to enhance the political feasibility (Ackermann and Eden, 2011a) of the strategy making outcomes achieved.

In terms of theoretical implications, these findings suggest that inclusive design concepts might extend strategy making theory, addressing challenges identified in the literature associated with current dominant views of how, and with whom, strategy should be made. Our findings indicate that if inclusive design principles are applied to the design of a strategy making process then through enhanced perceptions of procedural justice and rationality of resulting adjustments, political feasibility of strategy making outputs will be positively impacted across the organization, raising the likelihood of gaining broad organizational support for targeted strategic outcomes (Eden and Ackermann, 2001; Kim and Mauborgne, 2005). We also find that if inclusive design principles are applied to the design of a strategy making process then through enhanced social and practical acceptability with strategy users, the strategy making outputs realised will be perceived as qualitatively better than those delivered by alternative process designs, improving realism and implementation potential of outcomes generated by the process, and the participant experience for all users (Eisenhardt, 1990; Mintzberg, 1994).

Whilst we have developed these theoretical implications on the basis of a situated piece of action research, there is a claim for analytical generalizability (Yin, 2003) in the underlying arguments through connection with recent inclusivity studies, such as the work of Fujimoto et al. (2013). Our research also offers an alternative perspective to Whittington et al.’s (2011, pp. 535) argument that whilst strategy making is evolving, “inclusion and transparency do not extend to the transfer of decision rights with regard to strategy”. Whilst attempting to connect the ‘big picture’ ideas of inclusivity to how strategy work might be undertaken, in line with the call by Whittington et al. (2011, p.542), our empirical findings
suggest that an inclusive strategy making process might actually lead to a distribution of strategic decision making rights that benefits the organization.

In terms of further theoretical contribution, our focus on the possibilities of inclusive design offers insights that might be related to contemporary debates focusing on inclusion in relation to diversity and equality (e.g. Özbilgin and Tatli, 2011; Oswick and Noon, 2012; Jonsen et al., 2013), gender issues in management (e.g. Broadbridge and Simpson, 2011) or the segregation of disabled employees from the ‘mainstream’ workforce (e.g. Konrad et al., 2013).

The theoretical implications outlined above would be strengthened by replication studies (a) in the C-Change setting as the strategy making process is repeated (b) in alternative third-sector settings (c) with alternative framings of the strategy making process beyond that advocated by Ackermann and Eden (2011a).

**Practical Implications**

Our findings suggest that for human as well as economic reasons, the application of inclusive design principles are worthy of further exploration in managerial practice. Our study highlighted improvements that might be yielded by applying inclusive design principles to business processes typically characterised by hierarchical exclusivity and exclusionary methods. By increasing the variety of ideas feeding into the process, a qualitatively ‘better’ output was achieved in terms of strategy outcomes. When considered alongside improvements to the political feasibility of the outputs, the implementation potential of the strategy was arguably significantly enhanced by adopting inclusive design principles. Thus, if the aim of a management team is to optimise the realisation of beneficial organizational outcomes, there would seem to be a managerial logic for incorporating inclusive design principles into business process design.

In our study the importance of management commitment to the adoption of inclusive design principles was evident given the high profile nature of the strategy process under review. An initial managerial invitation to organizational stakeholders to participate was undertaken in the knowledge that the material returned would likely be poly-vocal, initially conflicting and potentially uncomfortable reading for the management team. As argued by Bontoft and Pullin (2003) though, this openness provides a bridge to emotional engagement with the lives of others that ultimately reaps major dividends in the quality of the outputs delivered by an inclusive design process.

As an anti-discriminatory consideration increasingly supported by legal and commercial arguments, the adoption of inclusive approaches to designing business processes and work environments will likely become more prominent on organization’s strategic agendas. And by providing a means by which to realise the potential of the full range of talents within an organization hitherto unthinkingly excluded by organizational design, inclusive design mechanisms might contribute to creating ways of working and performance gains that are better for all associated with organizational life.

**Concluding Remarks**

As we contemplate our organizational environments through a lens of inclusive design, it would seem that unthinking exclusionary ‘good enough’ processes and practices are prevalent. Rather than accept this state of affairs as an inevitable consequence of fast-paced 21st century life, our action research project showed us that this is an opportunity to be
seized. Through further collaborative academic and practitioner action and participatory methods, we might build and apply understanding of the ways in which inclusive design approaches can enhance the human experience of work across the employee population whilst delivering multi-dimensional organizational performance improvements. We hope this paper provides a useful foundational step in this promising and exciting journey.
References


<table>
<thead>
<tr>
<th>Common Characteristics</th>
<th>Inclusive Design Theory</th>
<th>Making Strategy Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>User –centric</td>
<td>The ability of people across the user population drives design outcomes</td>
<td>The needs of a group of participants is used to shape the design of strategy making forums</td>
</tr>
<tr>
<td>Iterative</td>
<td>Through repeated application of the knowledge loop, design concepts are reshaped to meet user needs</td>
<td>Through repeated analysis, discussion and modification of a causal map, participants shape the outcomes of the negotiated conversation</td>
</tr>
<tr>
<td>Participative</td>
<td>Participants from across the user population are regularly involved in evaluating and modifying designs</td>
<td>Managers responsible for delivering the strategy participate in the strategy making conversation</td>
</tr>
<tr>
<td>Mediating prototype</td>
<td>Rough prototypes of concepts are used to mediate interactions and encourage the exchange of ideas between the design team and end users.</td>
<td>As a transitional object the causal map acts as a mediating prototype—a constantly evolving, rough and ready visual aid that catalyses exploration and learning about emerging ideas amongst participants</td>
</tr>
</tbody>
</table>

**Table 1 – Common characteristics of Ackermann and Eden’s (2011a) Making Strategy Process and Inclusive Design Theory**
<table>
<thead>
<tr>
<th>Phase</th>
<th>Timing</th>
<th>Description of Activities</th>
</tr>
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</table>
| Agreement of Project       | April 2012      | - Initial informal discussion identifying shared interest followed up with formal meeting  
- Project scoped & agreed – work collaboratively to develop a strategy making process incorporating inclusive design principles |
| Initial Process Design     | May-June 2012   | - Working design group formed with C-Change representatives (board, management, service users, accessibility consultant) and academic team  
- Demonstration of established mechanisms - causal mapping sessions, voting etc. informed debate  
- Exchanges of ideas over 3 meetings iterated to initially accepted process design |
| Peer Group Workshops       | July–October 2012 | - 5 workshop sessions conducted at the University  
  o Service users (n=8)  
  o Functional managers (n=10)  
  o Service team leaders (n=7)  
  o Service workers (n=6)  
  o C-Change Board (n=10)  
- Workshops facilitated by academic staff, casual mapping undertaken by academic staff, visual display prepared by external consultant  
- Participant views captured in session and through post-session feedback; prompting incremental adjustments to process  
- Outputs of session – text-based, causal mapping images, visual display picture – returned within 24 hours to all participants  
- 419 discrete ideas and 487 user proposed relationships between ideas captured across all workshops |
| Compilation and Analysis   | November–December 2012 | - Working group discussion of method for combined analysis  
- Academic team to undertake off-line integration of priorities identified in each session, integration of causal maps, thematic analysis and summary of peer group workshop outputs  
- 19 themes identified – used to organize 74 potential priorities  
- Outputs of analysis used to prompt feedback from working group and design final review workshop |
| Final Review Workshop      | January 2013    | - Open day held in C-Change meeting rooms  
- All visual outputs from workshops put on display for all to review at their leisure(workshop process anonymised individual contributions)  
- Graphical display of analysis outputs created, and all stakeholders invited to use ‘dot method’ to provide feedback on potential priorities  
- At the end of the day, collective discussion with all process users about implications of dot method |
| Outputs                    | February 2013   | - Academic team compiled outcomes of review workshop into multi-modal 5 page statement of strategic intent reflecting 26 priorities for C-Change to consider addressing over the next 3 years |

**Table 2 – Chronology of Research Activity**
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Original</th>
<th>Adjusted</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement of ‘users’</td>
<td>Strategy sessions with management team and board</td>
<td>Strategy sessions across hierarchical levels and with service users</td>
<td>Rethink ‘users’ of strategy as all with a direct stake in the organisation’s future, not just senior management</td>
</tr>
<tr>
<td>Accessibility of instructions</td>
<td>Reapply paperwork templates and formats (e.g. ethics forms, pre-session info, post-session feedback)</td>
<td>Revise paperwork templates for accessibility and multi-modality</td>
<td>Design out unnecessary barriers to understanding the process; make the materials more engaging &amp; better prepare all users for what to expect in the sessions and to contribute their views</td>
</tr>
<tr>
<td>Accessibility and usability of strategy prototyping mechanism</td>
<td>Use computer generated causal map as transitional object / prototyping mechanism</td>
<td>Augment computer generated causal map with visual display prepared live, in parallel, by a graphic artist</td>
<td>Causal mapping retained to protect functionality of process (capacity to analyse outcomes); addition of visual displays provided engaging alternative representation</td>
</tr>
<tr>
<td>Location of sessions</td>
<td>Run all aspects at C-Change</td>
<td>Run initial workshops at the University, and host collective event at C-Change</td>
<td>Enhance user engagement with novel off-site experience; maximise promotion of research project &amp; enable user participation in final collective session</td>
</tr>
<tr>
<td>Accessibility of collective feedback mechanisms</td>
<td>Use computer voting session to evaluate collective outcomes</td>
<td>Use non-computer based, visual methods to gather collective outcomes</td>
<td>Avoid introducing barriers to participation – cognitive, sensory or time availability – and maximise the potential for social interaction</td>
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Table 3 - Adjustments to strategy making process design
Concerning:  Representative Feedback on Final Implemented Process

<table>
<thead>
<tr>
<th>Concerning:</th>
<th>Feedback</th>
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</table>
| Procedural Justice – ‘Fair Process’     | “This was a good process as it is really important that everyone has their say and that the people who C-Change work for are able to contribute to decisions about the future”  
Improvement Council Member |
|                                        | “The graphical mapping technique was ideal to ensure that there was equity in capturing the information of all the group which meant the reporting took account of everyone that contributed. It removed any room for excluding views of any one individual or group, making it a fair and open process”  
Functional Manager |
|                                        | “We’ve really been listened to – this has not been a token gesture”  
Personal Development Worker |
|                                        | “I think the process really works to allow people across the whole organisation to have a voice. I have worked as a personal development worker and now manage others as a support adviser - these two groups make up the majority of C-Change staff so it’s important to see that they can influence strategy work and take the same ownership of C-Change’s destiny as the people we work for and the central management team”  
Support Advisor |
| Procedural Rationality – ‘Sensible Process’ | “We meant to ensure that the people who use the services of C-Change could fully participate in setting the strategic direction of the organisation. As it turns, we could then see that the process could yield better outputs for the organisation by enabling us to draw on the full range of talents and expertise of all stakeholders.”  
Functional Manager |
|                                        | “The final session allowed us all to see what had been said by others – the voting was great as it gave us another chance to say what we think, even if we hadn’t attended a workshop.”  
Personal Development Worker |
|                                        | “Everybody involved in these sessions matters to the future of C-Change – not just managers - that’s why everyone needed to be asked what they thought”  
Support Advisor |
| Social Acceptability – ‘Engaging Process’ | “On the day of the session I attended it was inspiring from me to see a personal development worker who I recently inducted stand next to people we work for and my line manager, planning the future strategy with an equal voice and investment. This made me and my colleagues proud to be part of an organisation dynamic enough to embrace such a new method of decision making in the workplace.”  
Support Advisor |
|                                        | “The mapping session was amazing! I love the combination of the visual and the analytical – it was fascinating to be involved in this and it has got to be an approach that other organizations are going to want to do too.”  
Board Member |
|                                        | “It was great to go to the University – people’ll be thinking I’m a professor!”  
Improvement Council Member |
| Practical Acceptability – ‘Appropriate Process’ | “The project achieved what it set out to do - the unique perspectives and contributions of people who receive support was valued and included along with other stakeholders and strategy development was richer and more considered as a result of their input. This work shows that individuals who have been assigned reputations for challenging services can contribute to strategic planning when supported by a process that is inclusive & accessible”  
CEO |
|                                        | “We understood up front that there would be an extra cost in time and money involved; but we see it as an investment”  
Functional Manager on the Design Team |
|                                        | “I found the voting session very accessible and didn’t feel any barriers to contributing to the process”  
Improvement Council Member |

Table 4- Participant Feedback on Final Process Design & Output
Figure 1 – Application of the knowledge loop

Ideas relating to strategy – whether as a plan, a process, set of business practices etc. – are typically complex and riddled with uncertainty. This collaborative research project concerns exploring how strategy, normally undertaken by top management teams in organisations, can be made in a more inclusive way. As such, we will be running a series of workshops across groups and hierarchical levels within C-Change. This is a live exercise which will seek your views on what matters in the organisation’s future, which will form part of an organisation wide conversation.

Participation in this study is wholly voluntary and individuals should only commit to participation willingly. Any data (comments, quotation, feedback etc.) are the property of the participants and can be withdrawn at any time.

The request from participants is that they attend an initial mapping session at the university, and that

Figure 2 – Extract from Initial Participant Information Text
Figure 3 – Revised Participant Information Multi-modal Communication

Figure 4 – Extract from a Decision Explorer (DE) causal map
Figure 5 – Visual Display (1.6 x 2.4 metre)

Figure 6 - Clockwise from top left: - Visual displays open to review; inspecting visual maps; casting votes; visual voting displays and supporting decision explorer maps
**Choice, Voice and Support for the People We Work For**

First and foremost, we want to create and maintain a C-Change which helps people do things for themselves, not do it for them. We will increase the voice of people we work for and the improvement council in the organisation and we will seek to enable people we work for to build more social relationships; to choose what services C-Change offer and to have more flexible control of who is in their life.

**We think that we want C-Change to be like this:**

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><img src="image1" alt="Image" /></td>
<td>C-Change helps people do things for themselves, not do it for them</td>
</tr>
<tr>
<td><img src="image2" alt="Image" /></td>
<td>Have a strong voice of people we work for and the improvement council in the organisation</td>
</tr>
<tr>
<td><img src="image3" alt="Image" /></td>
<td>The people we work for are allowed to choose what services C-Change offer</td>
</tr>
<tr>
<td><img src="image4" alt="Image" /></td>
<td>The people we work for have more flexible control of who is in their life</td>
</tr>
<tr>
<td><img src="image5" alt="Image" /></td>
<td>The people we work for are helped to build more social relationships they want</td>
</tr>
</tbody>
</table>

**Figure 7 – Sample extract from final strategy document**