The Extent of Transformation: Measuring the Impact of Design in Voluntary Community Sector Organisations

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Abstract

A Design for Service (DfS) approach has been linked with impacts that significantly alter touchpoints, services and organisational culture. However, there is no model with which to assess the extent to which these impacts can be considered transformational. In the absence of such a model, the authors have reviewed literature on subjects including the transformational potential of design; characteristics of transformational design; transformational change; and organisational change. From this review, six indicators of transformational change in design projects have been identified: evidence of non-traditional transformative design objects; evidence of a new perspective; evidence of a community of advocates; evidence of design capability; evidence of new power dynamics; and evidence of new organisational standards. These indicators, along with an assessment scale, have been used to succesfully review the findings from a doctoral study exploring the impact of the DfS approach in Voluntary Community Sector (VCS) organisations. This paper presents this model as a first-step to establishing a method to helpfully gauge the extent of transformational impact in design projects.
Keywords: Service Design, Organisational Change, Transformational Change, Voluntary Community Sector.

Researchers have identified that designers' roles have expanded over the last decade from the creator, to those of facilitator, educator and entrepreneur (Yee, Jefferies, & Tan, 2013, p. 233). These shifts have also led to a change in the types of outcomes that result from using design to consider a service experience; as a service acts as a platform for action, the design activity can incite transformations on personal, organisational and societal levels (Burns, Cottam, Vanstone, & Winhall, 2006; Manzini, 2011). The transformational potential of services stems from their entrenched and dispersed positions in social systems, thus having the potential to impact

individuals, families and communities by suggesting and encouraging new behaviours (Ostrom, 1996). However, it is only in contemporary literature that the transformative powers of Service Design have been formally recognised, with discourse exploring design's role in inciting fundamental change in organisations (Bate & Robert, 2007; Junginger, 2006; Junginger & Sangiorgi, 2009), communities (Blyth & Kimbell, 2011; Thackara, 2007), and policies (European Commission, 2009; Rudnick, Miller, Kimbell, & Philipsen, 2010).

The terms design and transformation have often been linked; Simon's (1969, p. 55) definition of design as "the transformation of existing conditions into preferred ones" is a pertinent example. However, it was not until Burns *et al*.'s paper in 2006 that this area of design practice was proposed as a separate discipline; Transformation Design. Since then, a growing number of UK consultancies have described themselves as 'transformers', be it of people (Snook, 2014), public services (Innovation Unit, 2014), strategies (Uscreates, 2014), or organisations and communities (Taylor Haig, 2014). Similarly, Yee, Jefferies and Tan (2013) collected 42 stories on the changes in design practice and identified that many interviewees talked about their role in transforming existing conditions, into preferred ones (Yee et al., 2013).

Despite this growing recognition of the transformational potential of Design, it has been difficult to quantify this value in these social contexts. There has been a conscious effort to attain financial impact from design programmes (Design Commission, 2013; Design Council, 2010), but the complex nature of service value can make it difficult to track the significance of a design intervention in monetary terms (Lievesley & Yee, 2011). As a result, case studies are the most common format used to explicate the value of the approach.

In a recent doctoral inquiry exploring the value of a Design for Service (DfS) approach to Voluntary Community Sector (VCS) organisations (Author 1, 2015), the approach was introduced and applied within three VCS organisations in succession for a two-month period. In each organisation, data on the impact and perceived value of the approach to a range of stakeholders was captured during, immediately after, and in the year following the engagement. Stakeholders in Charities A and C reported outcomes that they considered to be 'transformational' as a result of using the DfS approach, whereas Charity B did not.

Without an existing model to measure the *extent* of transformation in design projects, it was not possible to establish if the perceived transformations in Charities A and C could be validated. Therefore, the authors conducted a literature review on subjects, including: the transformational potential of design, characteristics of transformational design, transformational change and organisational change. From this review, six indicators of transformational change in design projects were identified and used to gauge the extent of the transformation in each project setting.

This paper discusses the case study findings in relation to these six indicators, and proposes the model as a first-step in establishing the extent of the impact of design interventions in lieu of more traditional KPIs.

Research Study Methodology

This paper draws its data from three case studies conducted as part of a Doctoral Inquiry where design was used for the first time to explore a VCS organisation's issue. The study adopted

Action Research (Lewin, 1946; McNiff & Whitehead, 2011) and an exploratory case study method (Yin, 2003) as the focal research methodology (Author 1, 2015). In each of the three charities, the designer worked with a variety of stakeholders; staff and volunteers who administer services directly to clients; middle management; and executive leadership. The design activity and its impact was captured though a mixture of: project meeting recordings, reflection-on-action documentation and semi-structured interviews conducted by an independent researcher to ensure honesty and transparency.

The three organisations, along with a brief description of the design activity and outcomes directly attributed to it, are described below in Table **1**:

Table 1: A description of the charities, the design activity and the outcomes.

Charity A is a local organisation that is part of a UK federation (Network A). They provide mental health services across three boroughs in North East England.	
Design Activity: - Co-design new 'empowerment' system that supports service users to progress on from the charity's provision, including a partnership service and associated touchpoints.	**Design Outcomes:** - System proposition used to shape new staff roles, mission statement and policies. - Co-design and tested service proposition - Used design process evidence to apply for a successful £500k grant to deliver the system over three years.
Charity B is a local charity registered with a national federation, hereafter named Network B. Operating in one borough in North East England, they provide a variety of community education services to all ages.	

Design Activity:	Design Outcomes:
- Conducted research into its earned income, particularly focusing on how it could improve its membership system, which offered discounts on fitness, arts and children's services to the local community. - Ran co-design workshops to help co-create new membership structures and communication.	- Findings helped to shape the service to be more customer-focused, resulting in a new membership system, which resulted in an increase in memberships. - Created a new membership brochure used to improve customer communication. - Design research insights report submitted as part of a successful £190k grant application.
Charity C is a national charity based in North East England. Their mission is to engage children in reading and they offer a variety of services, both directly to the public and through educational institutions, which address this aim.	
- Conducted design research into the visitor experience in their building, communicated in a series of experience maps and a report. - Used findings to run idea generation workshops with staff and co-design and prototype new touchpoints.	- Research findings contributed to two successful grant applications totalling £1.9m. - Maps used to train new staff on the diversity of customers and their varying needs. - Seven of the nine prototypes improved the visitor experience, resulting in £50k increase in earned income, as well as better customer feedback. They are still in use in the centre.

To establish a way to measure the extent of transformation in each case, a literature review (Robson, 2011) was conducted. The results of this are outlined in brief below:

Transformational change in design projects

Design research that discusses the potential for the practice to result in transformation often reference Organisational Change literature to define exactly what is meant by the term (Junginger & Sangiorgi, 2009; Sangiorgi, 2011).

Sangiorgi (2011) transposed service design outcomes onto Levy's (1986) model of second-order change; that which changes the "metarules" (the rules of rules) of the organisation (see Figure 1).
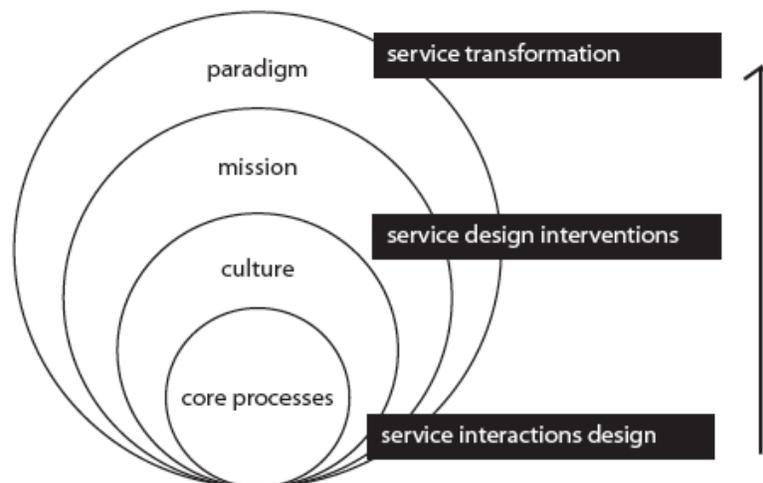

Figure 1: Levels of change within service design (Sangiorgi, 2011)

She purported that for Service Design to be used in a transformational way, a design team cannot just produce improved service interactions or design interventions, but must challenge the fundamentals of an organisation's behavior (Junginger and Sangiorgi, 2009; Sangiorgi, 2011).

Likewise, Burns et al.'s (2006, p. 21) seminal paper on Transformation Design describe it as "creating fundamental change". Wetter-Edman (2011, p. 69) suggests that transformation results in behavioural change, whereby there is a lasting impact on the organisation and/or community, and its stakeholders. It is the more significant change in all of these models, where the system itself is altered, that is now commonly accepted as transformational change.

Transformation Design models

Design discourse has attempted to generate knowledge on the use of the practice to effect transformation. Burns et al.'s (2006, pp. 20–23) 'call to action' first presented six characteristics that are prevalent in all transformation projects:

1. Defining and redefining the brief
2. Collaborating between disciplines
3. Employing participatory design techniques
4. Building capacity, not dependency
5. Designing beyond traditional solutions
6. Creating fundamental change

Figure 2: Burns *et al.* six characteristics of transformation design

They suggested that these characteristics required designers to work in new ways to "leave behind not only the shape of a new solution, but the tools, skills and capacity for ongoing change" (Burns et al., 2006, p. 21). Building directly on Burns *et al.*'s (2006) definition of the discipline, Sangiorgi (2011) defined seven key principles to transformational engagement drawn from transformative practices in Design, Organisational Development and Community Action Research (see Figure **3**).
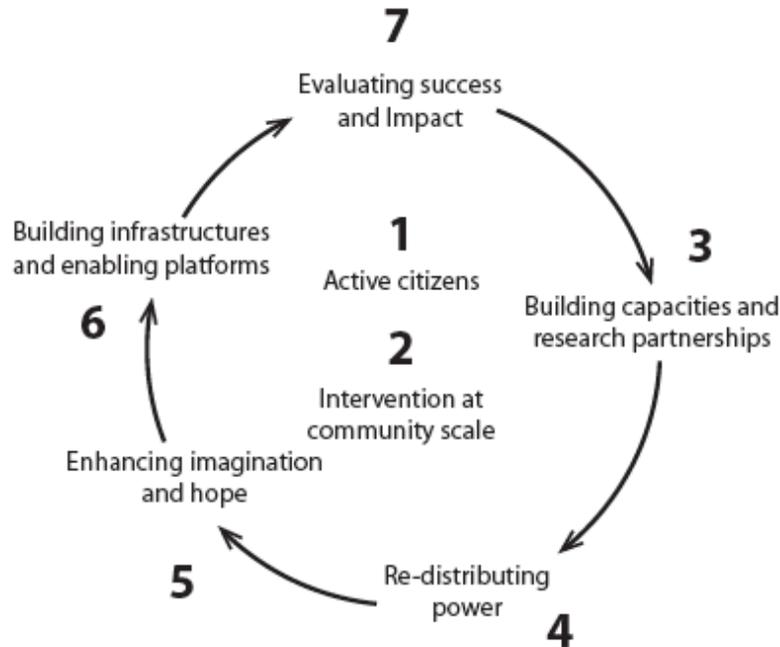
Figure 3: Transformational Principles (Sangiorgi, 2011)

Although both of these papers have suggested what comprises a transformational design process, the relative infancy of design practice with this aim means that there are no defined models that describe how to identify if the practice has had a transformational impact i.e. at what point organisational change is perceived to be *transformational* organisational change. Following the analysis process used by Denis *et al.* (2011) to identify themes with which to assess healthcare system transformation, the authors have reviewed literature and defined a model to measure transformational impact in a DfS project.

Drawing on studies of transformational change in organisations or communities, six indicators of transformational change have been identified. An early iteration of these indicators can be found in the co-authored paper (Author 1 and 2, 2012). These indicators, based upon an updated review

of Design literature in this context, are presented below, before describing how these were used to analyse the case study data.

Indicators of transformational change in DfS projects

Transformative design objects

In healthcare systems, changes in the services provided, or in their mode of delivery, that positively impact on the service user are considered indicators of transformation (Ferlie et al., 1996). Kimbell (2011, p. 49) found that the aim of a designer's engagement was to "create and develop proposals for new kinds of value relations within a socio-material world". In a transformational context, such 'value relations' are a means of altering the way in which organisations connect to individuals, and are often non-traditional (Burns et al., 2006).

The presence of non-traditional design outcomes that alter the way that an organisation, system or service interacts with its user should therefore be considered an indicator of transformation. These objects should not just be created, but be used and valued as a design outcome to support this claim (Kimbell, 2011a; Wetter Edman, 2011).

A new perspective

Thackara (2005) suggests that a new perspective is necessary to fundamentally change the status quo. Literature suggests it is design's human-centered focus that can provide this new perspective that acts as a platform for organisational change (Blyth & Kimbell, 2011; Edvardsson, Gustafsson, & Roos, 2006; Gloppen, 2011; Junginger, 2006; Kimbell, 2011). A designer often supports stakeholders to consider an issue holistically in order to correctly frame the problem

they want to address (Burns et al., 2006; English, 2006). This act of reframing can be viewed as a design method employed to bring about change, but the ability for stakeholders to then do this for themselves is seen as an indicator of gamma change (Bartunek & Moch, 1987; Junginger & Sangiorgi, 2009; Levy, 1986; Sangiorgi, 2011).

Evidence that an organisation has adopted a new way of viewing the services they offer or the challenges they face would therefore suggest that there had been a transformational outcome.

A community of advocates

Transformation, like service, is perpetual and indeterminate therefore a community of advocates is needed to continue to realise the change (Wetter Edman, 2011). A designer's role should be to facilitate the formation of a community who can provide the encouragement and permission for the DfS approach to permeate into other areas of the individual's or organisation's practice (Billings, 2011, p. 23; Manzini, 2011). Han (2010, p. 10) describes this as a 'Community of Service', and suggests that it is an intangible but essential outcome of Service Design practice, as it is this community that will deliver and consume the resulting change after the designer's engagement ends.

To this end, evidence of a community of project stakeholders who are advocates of the DfS approach in the organisation should be viewed as an indicator of a transformational outcome.

Design capability

In organisational change discourse, Greenwood and Hinings (1996, p. 1039) suggest that an enabler of ongoing radical change is capacity for action, whereby organisations possess the ability to "manage the transition" between the previous state, and desired state of change.

Much design research suggests that this requires a further shift in the designer's practice; they must go beyond the idea of designing service solutions with stakeholders and view themselves as capability builders (Burns et al., 2006; Manzini, 2010; Tan, 2012). In her model of transformational principles (see Figure 3), Sangiorgi (2011) suggests that building this capacity should be the first step in a designer's work, to engage them in tools and methods that help them to deal with complex issues and changing contexts as part of daily activity. Han (2010) on the other hand, suggests that capacity building happens as a by-product of the participatory approach, and knowledge is gained throughout the design process.

Evidence that advocates of the approach are able to apply it themselves would therefore be a further indicator of transformational change (Han, 2010; Manzini, 2011).

New power dynamics

Organisational Change research suggests that the reconfiguration of power and relationships should also be used to assess the transformation in an organisation (Romanelli and Tushman, 1994; Ferlie et al., 1996). Design literature talks in particular about the redistribution of this power amongst the community (Manzini, 2011; Sangiorgi, 2011; Tan, 2012). For communities to be empowered to co-design and co-produce their own services and systems (Brown, 2009; Burns et al., 2006; Sangiorgi, 2011), permission and a shift in power is required to enable this

contribution to be made and acted upon (Thackara, 2005; Sangiorgi, 2009; Design Commission, 2013).

In the VCS organisation, a change in the level of permission, job remit, and a more empowered community in relation to service development would all suggest that a transformative impact has occurred.

New organisational standards

Burns *et al*. (2006) suggest that the final characteristic of a transformation design project is that they fundamentally change the community's or organisation's culture. As has already been outlined, literature states that without this change to the system itself, a change cannot be considered transformational (Levy, 1986; Junginger and Sangiorgi, 2009; Sangiorgi, 2011).

In Organisational Change, Ferlie *et al*.'s (1996) model for assessment of transformational change in healthcare suggests that "the creation of new organizational forms at a collective level" and "the development of a new culture, ideology and organizational meaning" are indicators of transformation. Design discourse suggests that a practitioner must not only create a community of designers with a new, shared, way of thinking but also co-create a new vision for the organisation with structures that support this new organisational worldview (Manzini and Jegou, 2003; Junginger and Sangiorgi, 2009; Tan, 2012).

Thus, new organisational standards, including policies, aims and visions, should be considered evidence of transformation in the setting.

Measuring the extent of transformation

The literature review established six indicators that can be used to signify meaningful transformation at an organisational and community level; evidence of non-traditional transformative design objects; evidence of a new perspective; evidence of a community of advocates; evidence of design capability; evidence of new power dynamics; and evidence of new organisational standards.

Following the initial analysis of the case studies, these six indicators have been used to gauge the level of transformation exhibited in each of the three cases. A scale ranging from zero to five was created to grade the level of transformation in relation to these indicators, with zero meaning no evidence, and five representing complete transformation. To enable accurate scoring, a guide was created detailing the type of evidence required for the minimum (1), mid (3), and maximum (5) score for each feature (see Figure **5**).

Evidence of transformative design objects:
1 = a single design object in use that alters the way the organisation relates to some stakeholders;
3 = a series of design objects in use that alters the way the organisation relates to some stakeholders;
5 = numerous distinct designed objects in use across various services/offerings, that alters the way the organisation relates to all of its stakeholders.

Evidence of a new perspective:
1 = a new way of viewing a challenge or service that has influenced behaviour on a limited number of occasions;
3 = a new way of viewing challenges, services or a system that has been applied in certain situations;
5 = a new way of viewing challenges, services and systems, applied consistently to all decision making.

Evidence of a community of advocates:
1 = one advocate of the DfS approach and some sharing of the approach within their organisation;
3 = one or more advocates of the DfS approach, with some sharing of the approach within and outside of their organisation, and the intention to engage DfS expertise in the future;
5 = numerous DfS advocates, extensive sharing of the approach within and outside of their organisation, and the engagement of DfS expertise.

Evidence of design capability:
1 = one stakeholder who is able and confident to use one or more design tool(s) to consider a specific challenge;
3 = one or more stakeholders who are confident and able to use several design tools to consider a specific challenge;
5 = a group of project stakeholders that are confident and able to use a plethora of design tools to consider a range of challenges.

Evidence of new power dynamics:
1 = one stakeholder who has been more involved than they have been previously, in the development of a service or system, on at least one occasion;
3 = one or more stakeholders who are more involved than they have been previously, in the shaping and development of services or systems, on a regular basis;
5 = a group of project stakeholders that are more involved than they have been previously, in the shaping and development of services or systems, and it is now part of their job description to do so.

Evidence of new organisational standards:
1 = new policies and procedures for one or more services;
3 = new policies, and a new vision or aim for one of the organisation's services or systems;
5 = new mission, vision, aims, and policies for the organisation and its services.

Figure 4: A scale to guide the scoring of the extent of transformation in the case study

These guides were used to consider the data collated throughout the case study, but in particular the post-collaboration interviews, which tracked the design outcomes over time. Only outcomes directly attributed to the design activity were considered during this process.

As the scores were derived from the statements made by the project stakeholders, it could be argued that there may have been some bias or overstatement in order to improve the perception of the charity. However, as the participants were unaware of how this data would be specifically used, or the features against which they would be measured (none of the questions asked referred specifically to any of the six indicators), the data should be considered accurate. Moreover, as it is the VCS organisation's perception of DfS outcomes by which any future engagements would be measured, their viewpoint, regardless of accuracy, should be considered as appropriate data. However, as this scoring process was based on data gathered during and up to 12-months post-collaboration, it only provides a snapshot of the potential change, as transformational outcomes are ongoing and continuous (Greenwood & Hinings, 1996; Holmlid, 2007)

Applying the scale

To minimise the potential for bias, an independent design researcher undertook the same process. They were provided with the anonymised data interviews for each charity, which included interview transcripts, meeting notes and reflection logs. They were also provided with the scales to guide the grading process and a blank copy of a diagram on which to mark their ratings. The researcher completed the same activity as the authors in isolation, before comparing our respective results (see Figure 5 for the second markers results).
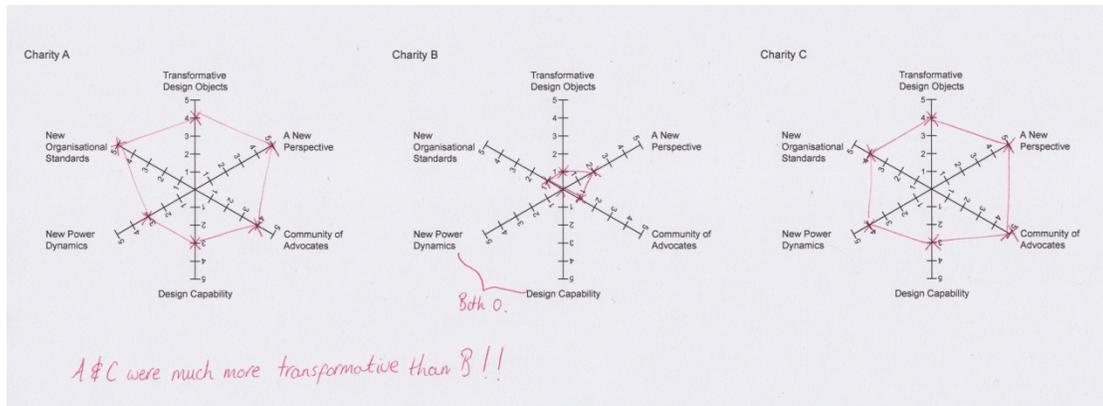
Figure 5: Scanned copy of how the second marker rated each of the cases against the six indicators of transformation

The Authors' results only differed with the second markers on three points; the community of advocates score given to Charity A (by one point); the new organisational standards score given to Charity C (by one point), the transformative design objects score for Charity B (by one point). After reviewing the evidence for these indicators together, it was agreed that in relation to the community of advocates score, Charity A should be awarded the higher mark. Regarding the other two disparities, both charities were awarded the lower mark.

The agreed scores for each charity against each of the six indicators of transformation can be viewed in Figure 6.
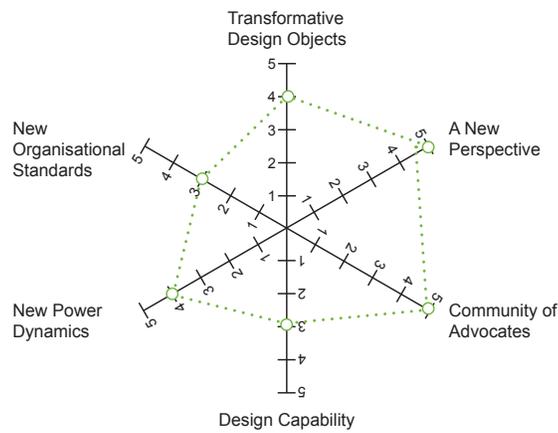
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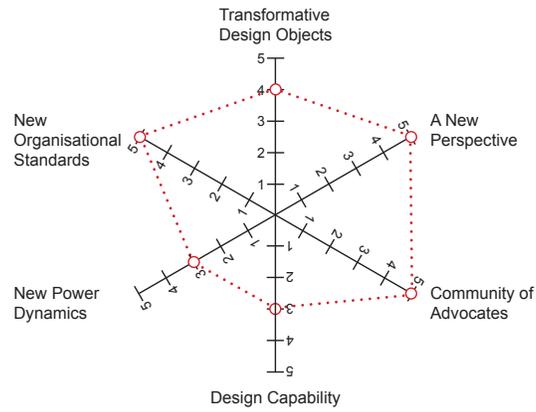
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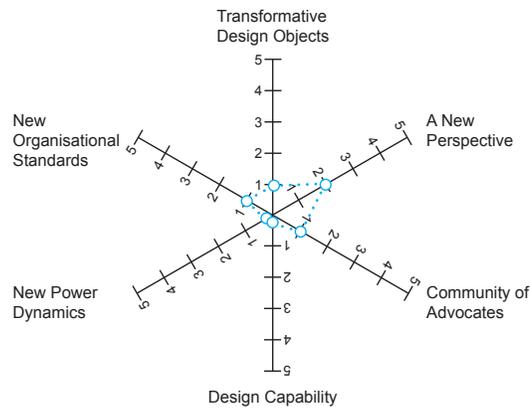
Charity C

Figure 6: Diagram that shows how each of the cases has been rated against the six indicators of transformation

Discussion

Transformative design objects

Charity A – 4; Charity B – 1; Charity C - 4

Charity A and C have both scored four out of five for evidence of transformative design objects. In Charity A, the design activity resulted in several new job roles, Empowerment Workers, which altered the way that the organisation engages with its service users. There is now an impetus on supporting people to create new routines and adopt new roles in their local community, in order to progress from Charity A's provision. Furthermore, the organisation also uses a 'partnership personal plan', co-designed to enable their service users to set goals and keep track of the progress they are making in improving their mental health. This series of transformative design objects has altered the way the organisation supports its customers, placing it above three on the scale. However, the transformative objects have not yet permeated into other service offerings, such as counselling, preventing Charity A from obtaining a five on the scale.

Similarly, Charity C's stakeholders reported that they also had new touchpoints in place that had altered the customer's experience. Seven out of the nine prototypes created in the collaboration were still in place, including a new sticker system, which allowed staff to identify if they were day visitors or annual pass holders, and thus relate to customers in a more tailored way. Although currently the designed objects only impact on visitors to the centre, there are also plans to retrain staff to provide a performance that relates to every exhibition, which would impact on all customer types, including the work they do in schools. If this were to happen, it could be argued

that Charity C would then reach five on the scale, however as it stands, the limited reach of the transformative design objects places them at a four.

In contrast, Charity B has scored just one on this scale; having a single transformative design object in use that alters the way the organisation relates to some stakeholders. A newly designed membership system changed the way that customers consume some of the services, impacting on the health and fitness offerings in particular. However, there have been no subsequent changes to the membership material or job roles. Furthermore, the changes have had a more profound impact on the customers in receipt of social welfare benefits (who can access more services at a reduced price) than any other user group. The single transformative design object, coupled with a limited benefitting stakeholder group, means the transformation can only be ranked at a one on the scale.

A new perspective

Charity A – 5; Charity B – 2; Charity C - 5

Charity B's highest grading comes on evidence of a new perspective in the organisation, where they have been awarded a rating of two. In the post-collaboration interview, the CEO described that the charity had a new way of viewing both the membership system, resulting in a new customer care department, and the building challenge, resulting in an alternative plan for the use of the building. However, there had been no significant changes to their services or systems, which keeps them at the lower end of the scale.

Conversely, there is evidence in Charity A of a consistent application of a new perspective that they attribute to the design work; "the ripples from [the engagement] have gone through the whole organisation" (CEO, Charity A). The permeation of this new perspective can be seen in their revised policy towards funding, where grants and commission need to align with the precise needs of their beneficiaries, and recruitment, where creative skills are considered alongside mental health expertise. As a result of their affirmation of a new organisational culture, and indications of a consistent application of this more user-focused practice, the charity has been placed at a five on the scale.

Likewise, the data collated in Charity C also places them at a five for evidence of a new perspective. The CEO noted that staff members, in particular front-line workers, were now looking "through the other end of the lens". There was evidence that this new perspective had been applied not only to services, but to consider the systems within the organisation. In particular, the research undertaken as part of the collaboration has underpinned the charity's new focus on valuing the social aspect of the experience they provide as equal to the educational facet. Their bookshop was reconfigured to reflect this, providing more space for parents and children to listen to and tell stories, and they created an indoor picnic space to provide further opportunities for social engagement.

Community of advocates

Charity A – 5; Charity B – 1; Charity C - 5

Charity A and C have both shared DfS practice within their organisation, with the former including it in their staff away day, and the latter inviting a university's Design department to

present to staff. Both Charity A and C shared their experience of the practice with external stakeholders; Charity C have detailed the work in their subsequent successful funding applications, whilst Charity A's CEO has presented to Network A's CEOs. Charity C's recruitment of a university Design department to run a workshop can all be considered evidence of DfS engagement, which elevates them to a five on the scale. Charity A have also subsequently engaged with other Design teams, which can also be viewed as further use of the process, giving them the maximum score.

In contrast, Charity B have only scored a one on this scale, as there is one advocate of DfS, and limited evidence of sharing the approach within their organisation. Only the CEO now remains at the charity, however, even at the six-month interview when three of the project stakeholders were still in post, there was no suggestion that any additional dissemination had taken place.

Design capability

Charity A – 3; Charity B – 0; Charity C - 3

When considering the design capability at Charity B, there was no evidence available to award any points. The analysis of the project activity and the post-collaboration data shows that none of the project stakeholders express any ability to use design tools. Whilst the CEO described adopting a more engaging approach to consultation, he did not utilise any design tools to support this. It is thus considered evidence of a new perspective, as opposed to design capability.

Conversely, Charity C have continued to use the same activities undertaken during the engagement to consider and improve the experience for visitors; "[the marketing team is] using

the service design methodologies to observe the way that people are using the space". Further evidence can be seen in the management team's use of the personas in the customer experience maps created as part of the design activity to help them think about spaces in the building from the perspective of these different characters. However, the organisation has not used any of the design tools to consider different contexts or challenges than those tackled during the collaboration, which means that Charity C achieves a three out of five for this indicator.

The same level of design capability is exhibited Charity A, with their use of the design tools being encouraged, but not universally applied. Several project stakeholders have used a design toolkit created during the collaboration to consider particular project challenges, but feel that they do not have the capabilities required to undertake a complete design process without support.

New power dynamics

Charity A – 3; Charity B – 0; Charity C - 4

Charity C exhibited the greatest amount of evidence relating to the redistribution of power. They have continued to actively involve their front-line staff in the improvement of the customer experience in a way they had not done previously. As a result, staff are now contributing to challenges that are both within, and outside of, their remit. However, the organisation has not endorsed the use of design by including it in any job roles, which limit the charity's score to a four on the scale.

Likewise, Charity A have not formalised design into any of their staff posts, but they have reported a sense of empowerment in some of the project stakeholders. For example, the CEO

said the Business Development Manager now takes "a very integrated approach" to writing bids, involving more stakeholders in that process and as a result, she now has a "closer relationship" with various departments. The Wellbeing Manager has now become more of a challenging figure to the organisation, using her new way of viewing things to question the charity's practice. Both developments can be viewed as indications of new power dynamics, but as the evidence relates to their existing job roles and remits, it places the charity at a three on the scale. As with design capability, there was no evidence that Charity B had seen any redistribution of power since the collaboration, resulting in a score of zero.

New organisational standards

Charity A – 5; Charity B – 1; Charity C - 3

Only Charity A altered their mission and vision as a result of the engagement; "we work with you as a person, not a diagnosis or a problem or set of problems or an illness". Along with the previously described new funding policy, the wellbeing services' policy have also been updated to reflect the new organisational focus on progression and person-centred care. The extensive evidence of new organisational standards in Charity A has resulted in the maximum score of five.

Charity C has only achieved a rating of three for evidence of organisational standards. This can be viewed in the way that the organisation now engages staff cross-departmentally to consider the experience that is offered, providing front-line staff in particular with the opportunity and permission to make changes to the service. However, none of these standards have impacted the mission and vision of the organisation, remaining at a service level.

Again, Charity B has scored significantly lower, achieving a one on this scale. This mark was awarded for the new pricing policies in relation to the membership system, with the new customer care department also underpinning the evidence of new policies and procedures for one or more services. However, there were no further changes to policy, aims, mission, or vision of the organisation, or its services and systems, preventing it from achieving a higher rating.

Conclusion

This paper has shown that there is no specific model for measuring the level of transformation as a result of design activity, even though designers are increasingly inciting transformational change. As such, a review of existing research on transformation design and related subjects has been conducted to establish six indicators of transformational change in a design project; *evidence of non-traditional transformative design objects; evidence of a new perspective; evidence of a community of advocates; evidence of design capability; evidence of new power dynamics;* and *evidence of new organisational standards.*

The model has been used in this study to analyse the extent of transformation in the cases. This independently-validated process has shown significantly greater evidence of second-order change in Charities A and C than in Charity B. The scores of three or over in all of the indicators of transformation for both Charities A and C confirm the project stakeholders' view that the design activity resulted in changes to the organisations' culture. Conversely, in Charity B the low scores of two or less across the model show the collaboration only resulted in service interaction level change.

The six indicators model builds on those offered by Burns *et al.* (2006) and Sangiorgi (2011) to suggest how design projects could be evaluated to establish if they have resulted in a transformation, regardless of whether they have been set-up with that intention. Whilst this paper, nor the model, interrogate why those disparities in scores exist, it does highlight patterns (such as evidence of new perspectives being higher in all three charities) that can be used to begin to consider these.

This model is proposed as a first step in establishing a way in which the Service Design community could examine the outcomes of DfS projects in the future. However, further research is needed to understand the applicability of the indicators to other projects and how the model could support work within these contexts.

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