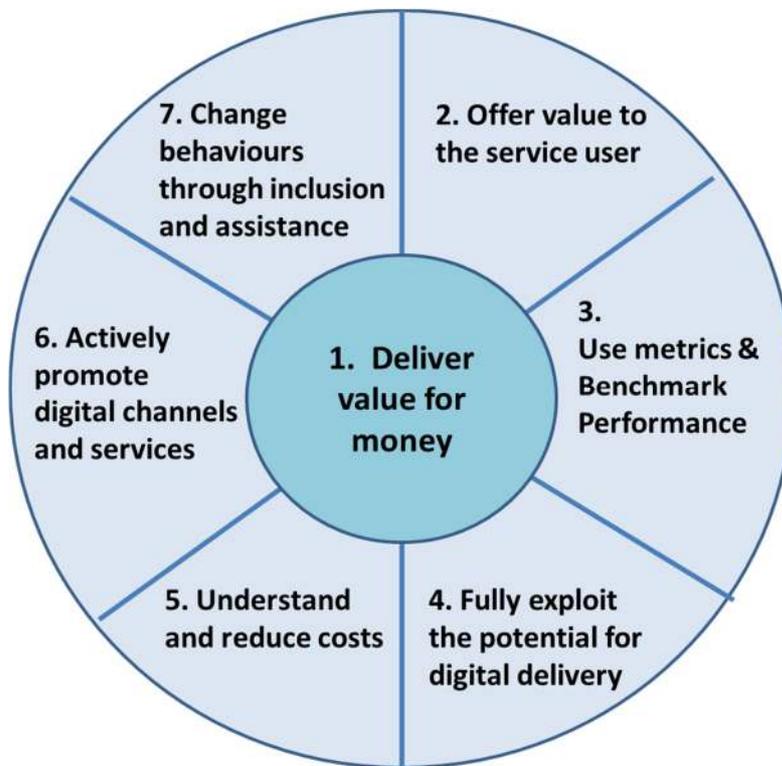


Digital Service Design: Seven Principles for Success

"I'm not lost for I know where I am. But however, where I am may be lost."
— A.A. Milne, *Winnie-the-Pooh*



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Widening the map view and accepting digital service design is a ‘wicked’ problem

This paper was inspired by having spent a year working on new approaches to digital inclusion for the Big Lottery funded One Digital project and then returning to the more familiar turf of [Digital Transformation Analytics](#) the Contact Benchmarking Tool (CBT) and the Strategic Survey. In moving from one project to the other I realised that I was not really moving very far. I was addressing the same service design challenge from a different perspective. It also occurred to me that digital service design solutions would be easier to arrive at and better if we recognised them as a single over-arching challenge not several separate challenges.

Although this approach means that the problem you are tackling initially looks bigger, it ultimately makes it more likely that you will succeed as you are now addressing all the key elements necessary for success not just some of them. I have also become aware that the kind of big messy and complicated challenge we face in digital service design belongs to a class of design problems known as ‘wicked’ problems. I will not attempt to explain the theory of wicked problems beyond giving some references to the origins of the concept,^{i, ii} but the attributes of wicked problems include:

- They don’t have clear boundaries as they are often parts of larger problems.
- Their solutions are never right or wrong just are better or worse.
- They don’t lend themselves to linear service design techniques and can only truly be evaluated as a whole design rather than the sum of separate parts.

Another spur for writing this paper was the formation of the [Public Service Transformation Academy](#). Clear themes were needed that allowed tools, support and approaches to be grouped and linked to tasks that were part of a practical plan for designing and implementing digital services. Seven principles emerged that if applied at every stage of the design and implementation process should radically improve the chances of success. In keeping with the idea of wicked problems, I don’t claim these are ‘right’ just less wrong than the alternatives.

Principle 1: Business cases and benefits realisation - Deliver value for your stakeholders

Even the most complex design solution is normally trying to achieve a simple beneficial outcome, which is quantifiable and has a cost associated with it. That ‘value case’ has to remain a guide star throughout the design process and an old fashioned business case along with basic programme management tools and principles will help that. I have seen many instances when project teams became so overwhelmed by the complexity and uncertainty of a design solution they became victims of the ‘magic numbers’ business case for digital which goes something like this:

Digital is cheaper and better and we have a formula from Central Government that tells us how much cheaper each contact in each channel will be when they are all digital, so if we do a calculation based on current contacts and the new ICT system costs less than this, then the savings case is made.

This key flaw in this approach is that it takes approximated and generalised estimates for savings from many different service areas and processes and applies them to your specific real processes.ⁱⁱⁱ It does not seek out the actual costs of delivery and where they fall. Calculating savings is something I have previously written a paper on and any business case needs to state **exactly** how any benefits will be realised even if that requires some fairly detailed cost analysis work.^{iv}

Tools for ensuring you deliver the intended outcomes for stakeholders

- Change needs to be managed to ensure benefits are realised. PRINCE II, MSP and benefits management can be used in 'light touch' forms and provide invaluable tools and check lists that ensure a business case is sound and evolves into a sound delivery programme.
- Combining workshops, coaching and external challenge can offer an effective way of very rapidly developing a sound business case that links to a delivery plan.
- Peer case studies and 'buddying' can provide insight and inspiration for change managers and service teams attempting to make a case for change and digital delivery.

Principle 2: It's not all about you – Customers have to want to use the digital service

There is a much copied Sidney Harris cartoon which has a project chart up on a huge wall. It's complex and composed of two separate logic flow diagrams on the left and right. Linking these stages is a small arrow with a note that says 'a miracle occurs'. In digital service design the note often says 'then all our customers go online'. This is of course the critical step without which the whole value proposition and business case collapses. It's often a step that comes with no explanations or justifications beyond 'they will just have to' and is something that the business case and project plan should have addressed from the outset. Contrary to what many service managers believe, designing a digital service that is attractive does not have to be a 'leap of faith'. Tools are available which can massively reduce the risk by reducing user resistance to switching to new online options and improving the chances of internal and external stakeholder support.

Tools for designing something customers want to use

- Demographic profiling and direct skills assessment offer ways to accurately estimate what proportion of service users could complete a process online.
- Process and journey mapping techniques allow accurate representation of the 'as is' and potential 'to be' process options in forms that allow easier analysis and comparison.
- Cost mapping and experience mapping techniques can identify opportunities to optimise the balance between improved customer experience and cost savings.

Principle 3: Metrics and benchmarking – knowing where you are and where you're going

It is surprising how many organisations attempt service re-design and transformation without thoroughly understanding and exploiting metrics. Any change manager should sleep much more soundly knowing that they have evidence that the change they are attempting is realistic and that monitoring is in place that will let them know if change is occurring as anticipated. This is in principle straight forward, but often a cause of failure when it's overlooked. This may seem obvious but as recently as this year HMRC was severely criticised by the NAO for a collapse in its telephone help system caused by cutting personnel on the assumption the online self-assessment service would massively cut demand for its telephone helpline. It didn't. ^v

Tools for benchmarking, milestone setting and progress checking

- The CIPFA/Red Quadrant Digital Transformation Analytics Service holds qualitative and quantitative Local Authority contact data which can be used to set benchmarked targets and milestones.

- Most Local Authorities have automated systems in place to log contacts and transactions in near real time and combining workshops, template development and support in change management can turn this 'data' into insights and indicators.
- Case studies and peer mentoring can help to provide inspiration and offer practical advice on making metrics part of day to day business.

Principle 4: Digital processes that add value and improve the quality of services

This is an area that may seem straight forward or a duplication of Principle 2, but is actually quite complex and about actual as well as the *perceived* value. The risks stem mainly from not recognising differences in stakeholder interests during the service design process:

- **Elected members** have an interest in costs, but their hearts are swayed by their constituents. This can make them keen to open new channels while being wary of closing existing channels; even though this adds costs without savings being realised.
- **Service users** will switch if a new channel feels easier or more reliable, but there may be significant inertia to overcome if they liked the old way of accessing services and they probably did like it if you worked hard to make it easy for them.
- **Service Teams** may be very reluctant to change as it requires short term effort and involves risk and uncertainty including risks to their jobs and roles.

These groups can't all get everything they want, but in a successful design they all get enough to gain their support and engagement or at least overcome their main objections. In achieving this it is often critical to frame the benefits in terms of the organisation as a whole as well as for individual teams or groups. Stakeholder mapping techniques can be very useful in framing a vision that gains sufficient support to make it implementable. In particular developing a clear and strong vision and benefits map can help in gaining support from the senior team and elected members.

Tools for working out the 'end to end' value for you and the service user

- Combining process maps, benefits analysis and design workshops can provide a coherent vision and link it to the service design and the project critical path.
- Stakeholder analysis and mapping can offer ways of understanding and engaging with stakeholders to arrive at a service design that they want to support.
- Peer mentoring and case studies can help in confirming what stakeholders feel is relevant and suitable for their services and service users.

Principle 5. Using fewer people and a smaller estate by achieving more automation & self-service

This can be a taboo area and I shall not make light of the impact that job cuts and radical changes to jobs will have on individuals, teams and whole organisations. There are essentially only two ways to save money through a new digital service design and they are to employ fewer people and reduce your premises costs.¹ If we refer back to Principle 1 the savings that the business case depends on will almost certainly require a reduction in jobs and giving up premises.

¹ More correctly reduce the costs associated with employing people and reduce the costs associated with accommodating these people in contact centres, call centres or other offices.

Implementing such change is another 'wicked' problem as there will be no right or wrong solutions, just better and worse ones. Possibly the worst solution will be to ignore the linkage between a new service design and your HR strategy. This has the potential to create a de-motivating atmosphere of fear and mistrust as employees fear uncertainty over their jobs and so resist change. From an ethical and business perspective it is better to work with employees from an early stage to manage the change.

Tools for predicting and managing changes in posts, premises and skills needs

- Analysis of current budgets, assets and spending provides a financial baseline against which the new digital service design and any changes can be compared.
- Benchmarking using peer contact data and approaches such as 'cost per outcome' or 'cost per customer' can help in understanding the viability of any changes. ²
- Peer mentoring and case studies can help in understanding the more emotive elements of change and how to best engage and involve stakeholders including your personnel.

Principle 6. Moving contact to digital 'self-service' channels

This may seem to be a duplication of Principle 2 which is to design services people want to use, but it is in fact a different challenge. Before you start trying to move people to your new channels and service design you have to be very confident they will like it. Only when you are confident that the majority will find it at least as good and probably better than what it replaces should you be trying to drive them to the new channel. Push someone to a service they find poor and they will be right back to the old channel in minutes, if not seconds, only now they will be prejudiced against any later attempts to move them over. This process is another wicked challenge in that you cannot know how your service users will respond until you do it. Trials, beta-tests, expert advice and design support will all help reduce risk, but until it goes live you will not know it's going to work.

Tools for moving digitally included and skilled customers to digital channels

- Templates and methodologies are available for planning a 'marketing' or 'push' phase of implementation to achieving an accelerated uptake of new online services.
- Focus groups, web analytics and live web-chat can all be used to pinpoint problem steps in processes and fine tune the user experience for digital services.
- Although no two Local Authorities will be identical, it is always sensible to start by looking at approaches that have worked elsewhere even if just to give elected members and the senior team the confidence to support the marketing work.

² In reality a combination of £ cost and Full Time Equivalent (FTE) numbers would be used to benchmark.

Principle 7. Changing service user behaviours: Digital Inclusion and Assisted Digital

While the other areas of change were primarily inward focussed and short or medium term this one is different. Digital Inclusion is a much longer term proposition involving fundamental changes in how your organisation interacts with some of its hardest to reach communities and service users. It is also almost certainly going to require partnerships that reach out into communities to engage with residents. Most Local Authorities will already have relationships with key stakeholders such as local DWP offices and Social Landlords. However, achieving a successful partnership for digital inclusion is likely to require major changes to how partners work individually and together. This is an issue that the Big Lottery has been addressing through the [One Digital partnership](#) which aims to develop new approaches and tools for Digital Inclusion that can be shared across the UK. The basic thinking and evidence behind this approach is set out in a paper I wrote with Dr Gail Bradbrook of the charity Citizens Online and draws heavily on grass roots inclusion work sponsored by BT. ^{vi}

This kind of approach to digital skills engagement and support is not unprecedented in the private sector. Selling smart phones typically involves providing a service that includes face to face support to set up phones, transfer SIM cards, move files and offering some basic training. Similarly, banks and building societies are increasingly offering face to face ICT support in branches as a way of getting more customers to transact with them online. In both cases the companies are looking at a bigger and longer term picture, not just short term wins with customers that are already online. Failure to take this forward leaning and inclusive approach almost guarantees that you will need to keep on providing a high level of telephone and face to face support to service users that might have been moved online.

[Tools for achieving digital inclusion as part of your long term service design](#)

- [The Big Lottery funded One Digital project](#) offers a platform for connecting with a range of national and regional digital inclusion resources.
- [The Digital Resilience model](#) developed by Citizens Online, who are key partners in One Digital, offers a model for resilient local digital inclusion partnerships and a source of support in setting up a local partnership including tools, skills surveys and guidance.
- There is a wide variety of support of support available ranging from publications and guides to online tools and training resources.

The Transformation Academy

While it is still early days for the [Public Service Transformation Academy](#), as a new not for profit social enterprise it is my hope that it can act as a hub where practitioners can share learning and offer support in all of these areas. In particular I hope it will succeed in reaching a good balance between sharing free resources, offering a platform for peer to peer support and providing good value capacity development and consultancy support. In the current climate of austerity and stream lining of organisations this certainly feels like the right approach.

About the Author: Gerald Power



Gerald indulging his love of hill walking, taking a 'leap of faith' from Eve to Adam on Tryffan, Snowdonia.

It's not a big or dangerous leap at 1.2 meters. It just feels very big and dangerous as you can see the road where you started 915 meters below you.

Gerald started his career as a research scientist and gained a PhD from Manchester University in polymer chemistry, working on the kind of conducting polymers that are now used in many of our phone and tablet displays. He then joined the Ministry of Defence on its science and technology fast track programme. Later he went on to specialise in change and benefits realisation with a particular emphasis on the role of technology, skills and behaviour change in the effective delivery of outcomes. During his career he has worked across all of the major central government departments including DWP, DH, HMRC, DfT, Directgov and DCLG. This has also involved working with Local Government, the third sector and industry in situations ranging from simple procurement to international collaborative alliances. His most prominent role within government before leaving to become a freelance consultant was with the Cabinet Office where he provided advice to Ministers on the economic case for digital services and on delivering cashable savings. Most recently Gerald has taken an interest in digital inclusion and has been working with the charity Citizens Online as part of the 'One Digital' consortium to develop new and resilient approaches to digital inclusion. He continues to work for clients on channel shift and service transformation and with CIPFA and Red Quadrant on the Digital Transformation Analytics Service.

ⁱ [Wicked Problems in Design Thinking](#). Richard Buchanan. Design Issues, Vol. 8, No. 2, (Spring, 1992), pp. 5-21

ⁱⁱ [Dilemmas in a General Theory of Planning](#). HORST W. J. RITTEL and MELVIN M. WEBBER. Policy Sciences 4 (1973), 155-169

ⁱⁱⁱ PWC. Champion for Digital Inclusion: [The Economic Case for Digital Inclusion](#). October 2009. Page 47. Table 12: Average costs of transactions in different channels

^{iv} [Channel Shift: Realising the Benefits](#). Dr. Gerald Power.

^v [HMRC. The quality of service for personal taxpayers](#). NAO. HC 17 SESSION 2016-17 25 MAY 2016

^{vi} [The case for a systemic approach to digital skills](#). Gail Bradbrook. Gerald Power. July 2014.