

Institution: University of Nottingham
Unit of Assessment: 19 Business and Management Studies
Title of case study: Getting IT right in the Public Services: improving design through action research
<p>1. Summary of the impact</p> <p>All too many IT projects fail, as many as 80%. To improve systems design in the public sector, Wastell has undertaken a sustained programme of action research, the main fruit being a design and innovation methodology, known as SPRINT. Its deployment has generated impressive benefits, e.g. a recent project produced an innovative set of tools for improving safeguarding in healthcare. Wastell's research has also highlighted the dysfunctions of the Integrated Children's System (ICS), a national IT initiative in social care. The research directly influenced the redesign of the ICS, feeding into the Munro Review of Child Protection, and has guided subsequent design work on IT for social care.</p>
<p>2. Underpinning research</p> <p>Information Systems (IS) development has a poor record in both the public and private sectors, with IT initiatives all too often ending in failure. The vicissitudes of the NHS mega-project, "Connecting for Health", provide a recent spectacular example. To address this problem, Wastell has undertaken a sustained body of research aimed at improving methods for systems design in the public sector. Since his appointment at Nottingham, this has focused on health and social care. The main fruit of this work is a design and innovation methodology, known as SPRINT, which provides an integrated set of design tools and techniques. The development of SPRINT has followed an action research approach, i.e. an iterative research methodology, involving cycles of action, evaluation and refinement. The method is thus constantly evolving, via feedback from its practical application in design projects and from the reflective experience of its users. The most recent phase of SPRINT's development (2007 onwards) has seen a fundamental shift in emphasis. Originally produced for the technical specialist, Wastell has redeveloped SPRINT as a tool-set for managers in general, arguing that design and innovation are integral to the managerial role.</p> <p>The evolution of SPRINT through action research is described in [3.1]. The concept of "managing as designing" is elaborated in [3.2] which sets out implications for the future development of the Information Systems field. The recent book by Wastell [3.3] draws together the various strands of his research on systems design in the public services. The book emphasizes the lead role to be played by public managers as designers and innovators in today's financially straitened times, i.e. since the financial crisis of 2008. Only innovative design enables the achievement of "more with less". Key examples are drawn from his ongoing work; a range of design tools and methods are described, including SPRINT, and implications are articulated for management education and practice.</p> <p>Two important action research projects may be highlighted during the 2008-2013 period, both in child welfare. The first (ESRC funded [3.1]) involved a critique of a national IT system, the Integrated Children's System (ICS), used by social workers in statutory children's services. This critique called for the redesign of the ICS and is described in several publications [e.g. 3.3, 3.4] which show how the ICS has disrupted professional practice. The research called for a different approach to design based on user-centred principles, and the design of a prototype "social care workstation" was sketched out in [3.5]. The second project, instituted in 2012, has been funded by the National Institute for Health Research NIHR [3.1]. The aim of this project is to enhance safeguarding at the hospital/social care interface. Using an action research approach, a set of tools has been developed for improving decision-making in acute hospital settings regarding children potentially at risk of abuse. The work has followed SPRINT principles and will produce further insights into design in the public sector, including refinements in methodology.</p>

3. References to the research

1. ***Wastell, D.G., McMaster, T. and Kawalek, P. (2007). The rise of the Phoenix: methodological innovation as a discourse of renewal . Journal of Information Technology, 22, 59-68. DOI: 10.1007/0-387-34410-1_17.
<http://search.proquest.com/docview/216198841/fulltextPDF?accountid=8018>
2. ***Wastell, D.G. (2010) Managing as designing: “opportunity knocks” for the IS field? European Journal of Information Systems, 19 (4), 422-431. doi:10.1057/ejis.2010.31.
<http://www.palgrave-journals.com/ejis/journal/v19/n4/abs/ejis201031a.html> (also available on request)
3. ***Wastell, D.G. (2011). Beyond techno-magic: managing as designing in the public services. Triarchy Press (available on request).
4. **White, S., Wastell, D.G., Broadhurst, K. and Hall, C. (2010). When policy o'erleaps itself: the tragic tale of the Integrated Children's System. Critical Social Policy, 27 (4), 443-461, doi: 10.1177/0261018310367675 <http://csp.sagepub.com/content/30/3/405.full.pdf+html>
5. **Wastell, D. and White, S. (2013). Making sense of complex electronic documentation: socio-technical design in social care. Applied Ergonomics.
<http://www.sciencedirect.com/science/article/pii/S0003687013000252>.
<http://dx.doi.org/10.1016/j.apergo.2013.02.002>.

Grant Award Details

1. Grant awarded to White, S., Wastell, D. and Pithouse, A. (2009). Error, Blame and Responsibility in Child Welfare: Problematics of Governance in an Invisible Trade. ESRC End of Award Report, RES-166-25-0048-A. Swindon: ESRC. £330k.
2. Grant awarded to White, S., Wastell, D., Smith, S. and DeBelle, G. (2012/13). Making the Case in Safeguarding: Enhancing Safe Practice at the Interface between Hospital Services and Children's Social Care. NIHR, Health Services Research Programme, c£200k

4. Details of the impact

The types of impact are described in two sections: the first relates the general impact of SPRINT on practice, via practitioner training and projects undertaken using the method, including a recent major project in health care. The second section specifically focuses on the impact of Wastell's research on the Integrated Children's System.

Informing practice: SPRINT training and projects

An audit of SPRINT training was carried out in 2010. At that time, approximately 1150 individuals in 150 or so agencies (>300 in 2008-10) had been trained in SPRINT by Salford City Council, in collaboration with Wastell. Salford City Council were partners in the original development of SPRINT, and used the methodology extensively on their e-Government programme prior to 2005, and the Council has since continued its use of SPRINT as a service improvement framework [3.4]. The training audit included a user survey. This showed a lasting positive benefit for over 60% of delegates.

To support the ongoing development of SPRINT, a User Group was established in 2005; User Group conferences have been held in 2008-12. Numerous workshops have also been held in various regions, designed and led by Wastell, especially during his sabbatical in 2009 (e.g. Bristol, London and Newcastle). International interest in SPRINT has come from as far afield as India (Ministry of Communication and IT) and Brazil (Agência Metropolitana de Minas Gerais). SPRINT has been updated since 2008, with a new website, an accreditation scheme and an advanced training model developed by Wastell; the latter has been piloted in one LA (Halton).

SPRINT has been extensively used on service design projects within the user community and a

number of case studies are documented in [3.4], on Wastell's website [5.1] and the official SPRINT website [5.2] which attest to the continuing impact of the methodology. An example is the "School's Portal" project in Lancashire County Council aimed at reducing bureaucracy in schools [5.3]. The project, led by a senior manager in the Children and Young People's Directorate (CYPD), has delivered very significant benefits, with savings of approximately £2 million estimated for the period 2008-10. Quoting from the case study report [5.3]:

"The project, led by Jane Beckford, followed the principles of SPRINT... Of the 83 business processes that the teams have re-engineered, the one that delivered the greatest return in terms of improvement was replacing printed materials with traceable electronic documentation. This reduced the overall bill from £1.6m to £100,000 in the first two years... The process re-engineering has identified waste and freed up time for people to do things that couldn't be done before. It has been about creating capacity within the organisation to deliver more for less, and to deliver a service that is measurably better than before."

The most recent SPRINT project has been funded by the National Institute for Health Research [3.2]. This 18 month project was launched in early 2012. It is a collaborative project with Pennine Acute Hospitals Trust (Manchester). The aim is to develop a set of tools for improving decision-making in acute hospital settings and communication with external agencies, Local Authority Children's Services in particular. Although the project is on-going, a tool, an electronic referral form, has been designed and is in use in the Trust where it has proved to be very effective. It was recently short-listed for an award at the National Patient Safety Awards (July, 2013), and was runner up in its category [5.4]

Redesigning the Integrated Children's System

White and Wastell's ESRC-funded research [6] on the Integrated Children's System attracted the attention of policy-makers, being published at the time of the Baby Peter trial. The ESRC rated the project as "outstanding", to a large extent because of its policy impact and their website lists 18 outputs [5.5]. White (Professor of Social Work) was the Principal Investigator on the project, focusing on social work policy and practice elements; Wastell was the co-investigator addressing systems design issues and implications. The research drew attention to the deleterious effect of the ICS on professional practice, making errors more not less likely. White was invited to join the Social Work Task Force, set up in the aftermath of the "Baby Peter" trial (Jan 2009). The Task Force's final report [5.6] called for the redesign of the ICS, and an "Improvement Board" was set up for this purpose. Both White and Wastell were subsequently involved in the ICT sub-group of the Munro Review of Child Protection, Wastell for his expertise in systems design. In her final report, Munro recommended that the design of ICT systems in social care should follow the user-centred "socio-technical" approach recommended by the sub-group, and which SPRINT embodies: [5.7, 5.8].

"A major challenge for local redesign is therefore to develop, with social workers, new ICT systems to meet their case recording needs... the analysis of requirements for ICT-based systems for child and family social work should primarily be based on a human-centred analysis of what is required by frontline workers." [5.7 p. 111]

Significant improvements to the design of the ICS have ensued, regarding its usability in particular, and Wastell has worked with several suppliers, most notably Corelogic. Wastell has been invited to present the results of his ICS work and its policy implications to a number of practitioner conferences, e.g. the Irish Association of Social Workers "Call for Change" conference (Dublin, 1/7/11) and the 3rd Child Protection and Welfare Social Work Conference in Cork (28/10/11), a major practitioner event, attended by the Irish Minister for Children and Youth affairs, Frances Fitzgerald.

5. Sources to corroborate the impact

1. www.managingbydesign.net. This web-site was set up by Wastell in 2012 to provide a

Impact case study (REF3b)

dedicated resource centre for public service managers interested in design and innovation. It contains case studies as well as technical resources for service redesign.

2. Official SPRINT user group web-site: www.sprint.gov.uk. This provides details of the SPRINT methodology as well as short case studies and details of user group events, including workshops and training.
3. Schools Portal Project: http://www.managingbydesign.net/my_library/Portal.pdf
4. <http://www.patientsafetyawards.com/749467> See category "Data/Information Management", Pennine Acute Hospitals Trust – highly commended.
5. <http://www.esrc.ac.uk/my-esrc/grants/RES-166-25-0048-A/read>
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