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Sustainable innovation through public procurement

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Abstract: Sustainability has been at the forefront of procurement policy in the UK in recent years, and innovation can be a key constituent to deliver the sustainability agenda. This paper uses a single case study to illustrate the procurement of recycled paper by a UK government department. It charts the transformation in procurement from that of a product to an integrated service, and highlights the procurement of a sustainable innovation to achieve multiple objectives. The study indicates the importance of certain factors for enabling the procurement of a more innovative and sustainable solution. In particular it illustrates the role of project champions driving change, senior management support, a good working relationship between buyer and supplier and the creation of a space in which trust and ideas generation can be enabled. Data is drawn from secondary sources, observations and in-depth interviews with public and private stakeholders participating in the process.

Keywords: Sustainability; innovation; public procurement.

Introduction

Sustainable procurement is seen as capable of delivering significant environmental benefits while achieving better value for money in public services, and has gained interest among practitioners, policy-makers and academics in recent years. Despite this increasing interest, evidence on the factors and barriers to adoption of sustainable procurement practices is still lacking. There is little empirical evidence demonstrating actual commitment to procurement practices by the public sector and evidence tends to be restricted to the procurement of 'green' products rather than services. The complementarity between sustainable procurement objectives and other agendas such as innovation and market creation have rarely been examined.

This paper gives an account of the sustainable procurement of recycled paper by HM Revenue and Customs (HMRC). The case describes a shift in procurement from product to an integrated service to improve traceability of confidential information while achieving sustainable procurement objectives related to the use of 100% recycled paper. The case highlights the importance of certain enabling factors in the delivery of a more innovative and sustainable solution to paper purchasing, in particular the relationship between the procuring organisation and its supplier, the role of project champions and senior management buy-in.

The structure of the paper is as follows: some contextual background to sustainable procurement is first presented. This is followed by a brief review of the literature on sustainability and innovation effects of procurement. The next section describes the research methodology for this study and the organisational and political backdrop to the development of the closed-loop project. The findings from the case study are presented, followed by a discussion of the findings. Finally, the conclusions are presented as well as areas for future research.

Contextual background

Sustainability, innovation and procurement

Sustainability has been at the forefront of procurement policy in the UK in recent years, and innovation can be a key constituent to deliver the sustainability agenda (Edler & Georghiou, 2007). Given multiple objectives in public procurement it is inevitable that tensions between policy objectives across different levels may exist or arise (Erridge, 2004). Discussions on the contribution of procurement to various policy agendas (e.g. social policy, sustainability, innovation, efficiency) tend to take place in isolation, without sufficient acknowledgement of tensions or even complementarities between policy objectives. Edler and Georghiou (2007) lament that the connection between innovation and certain policy goals such as sustainability and energy efficiency are “still insufficiently examined in the literature and poorly designed and taken advantage of in policy practice” (p.957). The contribution of innovation to sustainable procurement is increasingly acknowledged within the government; more recently the National Audit Office (NAO, 2009) acknowledged that “the public sector has considerable buying power, and the ability to influence supply chains to address government priorities such as sustainability both directly and [...] through encouraging innovation” (p20). The public sector spends £220 billion each year on procurement (OGC, 2010), therefore the potential to use procurement to deliver value for money whilst leading on the sustainability agenda is great. The NAO (2009) notes how “sustainable procurement offers the Government the opportunity to lead by example and to use its purchasing power to influence suppliers and the products they develop and design, for the wider benefit of others in the economy and the UK environment” (p.4).

Triggers and barriers to sustainable and innovation procurement

Walker and Brammer (2009) hypothesised that sustainable public procurement is often undertaken due to internal and external pressures on the organisation to do so. Organisationally, the financial viability of 'green' solutions, which are often perceived as being expensive (or requiring a big capital investment), internal attitudes, incentives and pressures for sustainable procurement are potential barriers. An organisational culture and structures and processes that are supportive and conducive towards sustainable solutions, as well as senior management support are considered key (Walker & Brammer, 2009).

The fragmented nature of public sector purchasing is barrier to the innovative potential of procurement (OFT, 2004). Even when the public sector accounts for a significant share of the total demand in a particular market, buyer power cannot be made effective if different functions or departments are buying the same goods individually and in an uncoordinated fashion. As noted by Phillips et al (2007, p.79), fragmentation and the co-existence of many "different purchasing decision points [...] can result in disharmony and a reduction in [...] purchasing power". This issue was reiterated recently in the Efficiency Review by Sir Philip Green (2010). Even seemingly 'unitary' parts of the public sector may not act as a coherent whole in practice (Caldwell et al., 2005), as they may comprise of different decision-making and purchase points.

Another barrier to procuring innovative solutions resides at the level of the individual; whereas relatively little in-house competence is needed when procuring off-the-shelf goods for the lowest possible price, greater competence is required to encourage suppliers to innovate (Rothwell & Zegveld, 1981). Changes in the procurement function towards a more strategic orientation, and a more demanding environment for procurement has led commentators to critically examine the skill and competency requirements of procurement professionals (Tassabehji & Moorhouse, 2008). Cousins et al (2006) also found that purchasers with high skill levels and knowledge have a significant impact on financial performance and operational efficiency in terms of quality improvement, design and reduction of lead times. The Sustainable Procurement Task Force noted that many parts of the public sector lacked understanding about sustainability and its relationship to procurement, and this was partly due to the fact that environmental specialists rather than procurement experts deliver sustainable procurement training (Defra, 2006).

Despite procurement being increasingly seen as strategic in public and private organisations, existing evidence suggests that the status of the procurement/purchasing function tends to be lower than in other functional areas, particularly in the public sector (Uyarra, 2010; Zheng, Knight, Harland, Humby, & James, 2007) and suffers from a general lack of commitment and ownership of procurement strategies by senior management and political leaders (Defra, 2006; Morgan, 2008; Walker & Brammer, 2009). The role of 'champions' has also been identified in securing the success of certain innovations, such as the introduction of digital signal process hearing aids into the NHS

as reported by Phillips et al (2007). A champion is a “charismatic individual(s) who throws his or her weight behind and innovation, thus overcoming indifference or resistance that the new idea may provoke in the organisation” (Rogers, 1995, p.414) and are typically powerful individuals high in the management of an organisation.

In many parts of the public sector, information on what is spent is of insufficient quality to support decision-making and ensure progress against policy agendas. Accordingly, spend cannot be effectively managed if it cannot be articulated effectively in the first place (HM Treasury, 2009, p.20). Externally, a good buyer-seller relationship has been highlighted as important in order to reduce uncertainty and encourage innovative responses from suppliers. Partnerships have the potential to build social capital by developing long-term relationships with private sector suppliers. Erridge and Nondi (1994) argued that interaction and exchange lead to developing trust and shared norms that reduce opportunism, the need for costly monitoring and general transactions costs associated with exchange in instances where there is information asymmetry. Nonetheless, Erridge and Greer (2002) suggested that such buyer-supplier relationships can be hindered by procurement practices, noting that “regulations and rules to ensure financial probity and competitive tendering have restricted the development of closer supply relations and social capital by setting out rigid bureaucratic procedures, and creating a public sector culture which is risk averse and resistant to change” (p.519) and suggested that there is an imbalance between transparency, value for money and relationship development, driven by rigid rules and bureaucratic processes, low levels of procurement expertise, a lack of interdepartmental collaboration and little involvement of senior departmental managers. According to Erridge and Nondi (1994), procurement practices that prevent adequate public/private partnering include “rigid application of tendering procedures for low-value items regardless of non-costs; too many suppliers; short-term contracts and the absence of cooperation from suppliers” (p.178). This focus on transparency when combined with a risk-orientated culture manifests in high levels of contractual procedures leading to reduced flexibility, trust and experimentation.

Lastly, space or slack, has also been found to facilitate innovation (Bourgeois, 1981; Nelson & Winter, 1982); it allows innovative projects to be pursued by providing a ‘safe space’ around uncertainty and risk thereby encouraging experimentation without detrimental consequences (e.g. to normal production) and sometimes resulting in unexpected benefit to a firm (Nelson & Winter, 1982). Slack “allows for intertemporal adjustments to demand or supply fluctuations” (Nohria & Gulati, 1997, p.604), and Rogers (1995) states that organisational slack is important for organisational innovativeness. Slack is often misconstrued as wastefulness, associated with idleness, incompetence and an inefficient use of resources. However, many authors have argued that slack is not necessarily a bad thing, and slack resources allows individuals and departments to experiment in ways that might lead to innovation (Nohria & Gulati, 1997).

Research method

In this paper we utilise a single case study to describe the shift from product procurement to the procurement of an integrated service. A case study approach was chosen to allow a “richly detailed portrait of a particular phenomenon” (Hakim, 2000, p.59) enabling the authors to take a fine grained analytical approach supporting theory generation. Case studies are the preferred strategy when ‘how’ or ‘why’ questions are being posed, when the investigator has little control over events, and when the focus is a contemporary phenomenon within some real life context (R. Yin, 1994; 2003). Eisenhardt (1989) further states that case study research is appropriate when “the focus is on understanding the dynamics present in single settings” (p.534).

It has been suggested that single cases allow for in-depth investigation and rich description of a phenomena (Walsham, 1995). Yin (1994) states that a single case study is appropriate where it is an extreme or unique case, or where it is a revelatory case (p.38-40). Nonetheless, the use of a single case study is not without its limitations. Hartley (2004, p.326) points out that “the challenge (in single case studies) is to disentangle what is unique to that organisation from what is common to other organisations”.

Multiple sources of evidence have been used to construct the case study. Semi-structured interviews were conducted with key individuals at senior management levels in the procurement function of HMRC and with the supplier, and supplemented with site visits by the researchers. An analytical line of enquiry was developed prior to interviewing in order to reduce bias and reflexivity. All data was collected between June and December 2010. The case study also draws on a variety of secondary data sources including market analysis, government reports, articles and media coverage. The data has been triangulated in order to reduce bias, and is presented as a narrative.

Case findings

The problem

In November 2007, HMRC hit the news headlines when it was reported that two discs containing (child benefit) details of 25 million people had been lost in transit to the National Audit Office. This highly publicised event was set amongst a backdrop of wider security concerns¹.

¹ Two other major cases of paper-related insecurity (one regarding disposal in April 2007 and one related to paper loss in Jan 2008) and 158 other centrally recorded Category I and II loss incidents were also reported to the Information Commissioner’s Office in 2007-08. Another 2 cases were reported to ICO in August and September 2008, and another 165 Category I-III protected personal data related incidents in 2008-09.

Commercial spend in HMRC is approximately £2 billion, of which £600m is spent on the procurement of third party goods and services (HMRC, 2010b). The majority of HMRC's activity involves VAT returns and the department is heavily reliant on paper-based communication. Print and office supplies accounted for £104 million of annual spend in 2007. However, the purchase of office supplies had been historically highly fragmented²; individuals could purchase from a variety of suppliers.

According to the OGC, the public sector spends around £850 million annually on stationery, and spend on pulp and paper by all departments is estimated at £1.7 billion (OGC, 2007). Defra estimated that central government procures 200 000 tonnes of paper each year, half of which is copy paper (Defra, 2010). Office supplies are considered a standard commodity, best consolidated and purchased collaboratively, implying standardising specifications, aggregating demand and utilising economies of scale. Collaborative procurement maximises savings whilst enabling commercial staff in individual organisations to focus on core, strategic, purchasing categories. However, this logic can break down; firstly, when it reinforces discrete purchasing rather than an integrated, more holistic, provision of services that can achieve better value for money. Secondly, what constitutes non-critical or strategic items is relative to the mission and objectives of the incumbent organisation. Due to their reliance on it, paper became a strategic item for HMRC, the same as turbines are strategic for the chemical industry and bottling equipment for breweries (Caniëls & Gelderman, 2005).

Paper also represents the largest component of HMRC's waste and reducing paper waste could potentially reduce the consumption of other stationery resources, e.g. toner cartridges. However, internally there were concerns about the accuracy of HMRC's waste management data due to the highly fragmented nature of estates management. This issue helped frame the new procurement process for 'closed loop' paper, introduced shortly. Recycling was also another key component of HMRC's sustainable development agenda.

Paper was thus already a key spend category for HMRC, able to be leveraged due to volume and meet sustainability objectives (in terms of purchasing of 'green' alternatives, recycling and disposal). However, the extraordinary events in 2007 led to a radical shift in paper procurement. Due to heightened security considerations, the procurement of confidential paper disposal services and copying paper for internal use became highly strategic. Indeed, the highly publicised incidents regarding the loss of confidential and personal data proved to be a significant turning point, with data security becoming a critical issue for HMRC. Internally, it was recognised that this incident provided an opportunity to turn things around in the organisation.

² This was also a finding of Sir Philip Green's review not just of office supplies but epidemic over many common categories of spend in central Government.

A review into the loss of child benefit data identified several structural weaknesses and obstacles in HMRC, including a failure to recognise information security as a management priority and an overly complex organisational structure with no focus on management accountability. One of the recommendations from the Poynter Review stated:

“HMRC has insufficient knowledge and oversight over its third parties’ compliance with information security requirements. It should urgently address this through a programme of assurance via Internal Audit, or if they do not have the capacity via an independent third party. This should start with third parties who handle post, confidential waste, off-site storage and who provide security services....” (R35)

Additionally, HMRC undertook an internal study focused on security data and IT, including paper security. It soon became clear that the large number of estates that HMRC owned and the way they were managed posed a problem. At the time the organisation had over 400 offices, 80% of which were managed through outsourcing arrangements and at least five different PFI arrangements. The budget for waste collection was held by Estate and Support Services (ESS) rather than centrally through the Commercial unit. Forty-three different arrangements were in place for restricted and confidential waste disposal resulting in limited traceability of (confidential) waste once it left the organisational premises. HMRC took the decision to centralise waste collection, partly in response to a Cabinet Office recommendation that all waste had to be shredded onsite and that departments had responsibility for waste once it had left the site. Facilities management services were also improved through new supply chain arrangements, of which one was for waste disposal. As part of a change programme running concurrently (in 2006 and 2008), HMRC consolidated their estates down to 235 offices, and relocated all procurement staff to a single office (in Manchester/ Salford). The decision to centralise procurement was perceived by the Commercial Director as important to the effective leverage of the function. To control off-contract spend, HMRC moved to centralised budgets³. Paper was identified as a commodity that could be procured more efficiently, through the aggregation of demand and economies of scale, using a centralised process. A shift towards a centralised procurement model was complemented by substantial investments in management information systems (MIS) to facilitate spend analysis and contract management.

The solution

The missing data incident in 2007 was a catalyst that enabled HMRC to resolve the problems mentioned above. A decision was made to find a solution that could serve all HMRC estates, facilitate tracking of waste and avoid a large number of individual

³ HMRC’s procurement capability review reports that “maverick” spend is less than 2%; in comparison, the US Internal Revenue Service reports maverick spend of less than 0.5%.

contracts. Key strategic issues were to trace and track waste, particularly confidential waste and to contribute to recycling rates and landfill reduction. The value attributed to waste also changed at this time⁴, which led HMRC to recognise waste paper as a valuable commodity, and that the value of this resource was being lost to the department.

The existing relationship with HMRC's primary supplier of copying paper (Banner⁵) facilitated discussions about innovative ways to tackle these issues. The responsiveness of the supplier during the crisis and their continued good relationship with HMRC led to discussions on developing innovative solutions for the paper supply and waste issue. Banner was tasked with conducting a data collection exercise on the volume of waste that HMRC generated. They surveyed HMRC offices to find out about existing arrangements (for waste disposal), volumes of waste generated, frequency and cost of collection. Due to the extraordinary circumstances and renewed political importance of ensuring data security, HMRC contracted Banner to collect all confidential paper waste in the interim⁶. Banner used the information they were in the process of collecting, in combination with an IT logistics system to organise their waste collection, and entered into a joint venture with a shredding company. Within the interim arrangement, HMRC and Banner developed, in partnership, an innovative, closed loop, solution to the confidentiality, paper waste disposal, and recycling problem.

“Closed loop” paper

After a series of long discussions, the closed loop concept (see Figure 1) was successfully trialled in May 2010. It provided a solution to the confidential paper waste problem by shredding it on-site and selling it back to the department as 100% recycled paper at a lower cost. The paper flow became a ‘closed loop’ with zero waste. The recycled paper mill also operates a closed-loop system to a high environmental specification⁷. The closed loop is secured by the mill using a dedicated production run. The resulting closed loop recycled paper is then sold back to government departments; currently HMRC, the Home Office, and the Environment Agency.

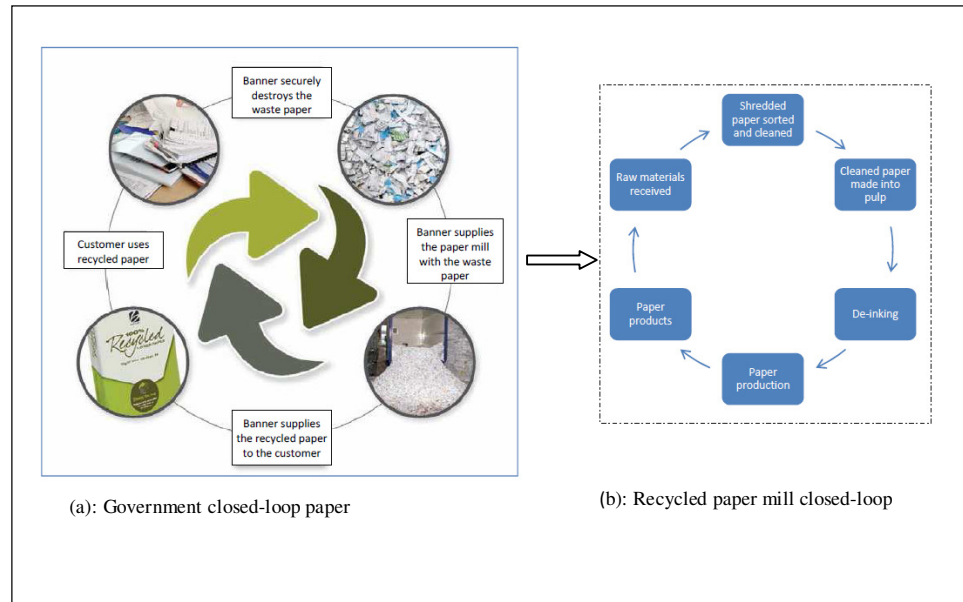
⁴ The typical price of recovered paper was worth up to £40-60 per tonne in 2007.

⁵ Banner Business Supplies (hereafter referred to as ‘Banner’) is a subsidiary of office2office plc. It was originally a division of Her Majesty’s Stationery Office (HMSO) but was privatised in 1996. It became a limited company in 2000 under the parent company office2office.

⁶ The company associated with the missing discs incident were negatively affected and it became difficult to attract suppliers to undertake confidential waste disposal.

⁷ The mill, based in Germany (there are currently no UK paper mills able to perform this function), uses 100% less wood pulp to make paper (compared to virgin paper); up to 83% less water consumption; up to 72% reduction in energy use; up to 46% reduction in CO₂ emissions; an integrated (combined heat and power) plant that has 50% reduced CO₂ emissions and 87% increased thermal efficiency.

Figure 1 The closed loop concept.



The closed loop process meets a number of procurement objectives not least resolving the confidentiality problem. In summary, these following were achieved:

- Traceability and accountability of confidential waste
 - Confidential waste does not exit the system, reducing the chance of fraud and increasing the security of information
- Value for money
 - Supplier is able to offer recycled paper supplies at a lower (and consistent) price as the organisation has provided the raw material. The price of the recycled paper is also not affected by price fluctuations in international recycling markets.
 - Competitive price for waste disposal
- Organisational innovation
 - HMRC were able to review their processes and streamline their restricted paper waste arrangements, reducing unnecessary costs
 - Savings of approximately £65k per annum have been estimated
- Sustainability objectives

- Process is more sustainable than the previous system and environmental impact reduced⁸
- Project contributed to, and was enabled by, other policy objectives such as innovation
 - Satisfied central government mandate of 100% recycled copier paper, which HMRC further believed they exceeded through the use of public sector waste to produce a bespoke product (HMRC, 2010a)
- Supplier and supply chain innovation
 - Substantial supplier capacity investment in IT systems, bespoke vehicles, shredding technologies, etc
 - Supply chain streamlined through combination of products with service provision

Discussion

As Walker and Brammer (2009) hypothesised, sustainable public procurement is often undertaken as a result of pressure on an organisation to do so. For HMRC, the data loss crisis of 2007 proved to be a critical juncture against which to deliver sustainability while addressing other critical issues simultaneously, and to do so through innovation. Here, we reflect on the various elements that came together to enable the sustainable procurement of innovation.

Barriers faced

The procurement system in place made it difficult to enable change in a cohesive way. Silo and functional-focused budgeting was normal and promoted segregated decision-making, privileged micro-management, and ultimately promoted conflict, both internally and with suppliers, leading to several different pricing strategies and agreements with different suppliers, sometimes for the same product. There was also no incentive or motivation for procurers to make initial investments required to save money in the medium to long term since they had to be accountable for the here and now⁹.

The move towards shorter-term contracts as a result of EU legislation impacted on the time needed to build relationships between buyer and suppliers, which is necessary to

⁸ There is potential, if rolled out, or diffused, for this process to shape the evolution of the recycled paper market in the UK.

⁹ This is why HMRC feels that centralised procurement, particularly for common categories, works. A mandate across departments will push this even further by forcing the use of this (cheaper) model.

reduce uncertainty and encourage innovative responses from suppliers. Service innovation requires a more long-term commitment compared to product innovation. The current mechanisms for procurement, e.g. shorter contracts (with the knock-on effect on buyer-seller relationships), transactional relationships and a focus on per unit purchases through Buying Solutions, reduces the ability of organisations to be innovative or to buy services.

Buyer-supplier relationship

As previously cited, a good working relationship between buyer and supplier is often crucial to reduce uncertainty, increase trust and encourage innovation. Traditionally, procurement relationships tend to be arms length in nature, embodying adversarial type interactions to negotiate the lowest possible unit price. In this case, the nature and extent of the relationship between the buyer and the current supplier proved crucial for enabling innovation. Banner had supplied paper to HMRC since 2002 and during renewal meetings both parties were able to discuss how the partnership could develop. An opportunity to combine waste disposal, paper recycling and paper procurement was identified during these various discussions. Specifically, they talked about the idea of 100% recycled paper produced from collected HMRC paper waste since 2002. However, several obstacles needed to be overcome for such a process to occur, including generating enough volume of waste paper and having access to a paper mill to produce it. It was agreed in principle to move towards a closed-loop model but the idea was ‘parked’ as it was too challenging; the model required management buy-in and a minimum volume of waste commitment for the paper mill. In particular, the latter was a major issue at the time since HMRC had no data on the amount of waste paper generated internally. The longer term relationship and the pricing format (based on a percentage profit for the supplier) enabled more open discussions. By working on costs and potential profits, an innovative solution economically attractive to both the client and the supplier was co-generated. Changing EU regulations were in danger of changing this.

Project champions and a space for innovation

‘Project champions’ are often crucial for securing the success of certain innovations (Phillips et al., 2007). Typically, these would be individuals in positions of power within the organisation; here, the Commercial Director and Procurement Manager. Sustainable solutions are often perceived as relatively expensive and may require an initial large capital investment and/or have no immediate returns. The support of senior management is crucial for sustainable procurement, a point reiterated by Walker and Brammer (2009) and demonstrated here. The Commercial Director had experience of purchasing in the private sector, recognised the disparity between private and public sector procurement and attempted to bridge the gap. The Procurement Manager was given the flexibility and space (and time) to develop a solution. She then engaged with suppliers, and particularly with one trusted supplier, to develop solutions.

Procurers have an important role to play, and are well-positioned within some organisations to influence decisions and deliver on sustainability commitments. In particular, they can use their position to articulate user needs and signal future requirements to the market, providing opportunities for product development and innovation by suppliers. The Procurement Manager had been in this role for a long time, and had previously chaired the OGC-Buying Solutions collaborative board for office supplies, therefore knew how to negotiate the complicated procurement landscape. She engaged with suppliers (both existing and potential) to generate ideas through 'blue-sky thinking' about how to stimulate the market and raised the possibility of the closed loop concept.

A project champion can make the difference between the success and failure of an innovation within an organisation. Success requires a 'shared vision' (Phillips et al., 2007). However, the champion also needs space to develop the new idea and turn it into an innovation. Significant organisational re-configuration of contracts, estates and budgets, was necessary to enable the closed loop process. The high profile data loss incident propelled the secure disposal of paper waste into a strategic and politically important objective. The critical nature of this new problem overrode existing procurement processes which had served to hinder the development of the proposed innovation. It facilitated organisational change, e.g. the development of efficient management information systems, which was necessary for the closed loop process to work. Importantly, the politically sensitive nature of data security ensured senior management buy-in. This critical problem provided a space within the normal procurement process for innovation; close collaboration and coordination was possible. In this case, the creation of a temporary space in which buyer and supplier could innovate did not detract from the optimal use of resources but utilised slack to promote experimentation and the pursuit of a potentially risky project. This problem was also framed by efficiency reforms, the shift of paper to a strategic commodity and a wider government policy objective for sustainable solutions. These factors converged and framed the space created by the extraordinary event. The focus on efficiency in the public sector arguably reduces slack, ultimately eliminating the potential of experimentation necessary for normal economic growth and paradoxically resulting in inefficiency. Intolerance of failure and risk aversion are traditionally embodied in procurement processes intended to ensure competition and transparency. In this case, only when the normal procedures were suspended in response to an exogenous shock was it possible to institute an innovative solution.

The case also confirms earlier findings from empirical work on local government procurement (e.g. Uyarra, 2010), in relation to the importance of leadership and status of procurers, the role of project champions, internal communication across departments, strategic engagement with suppliers and initiatives aimed at overcoming barriers to adoption.

Conclusion

This study explored the procurement of an innovative, sustainable solution in response to a crisis. We feel that the case described here demonstrates not only the successful achievement of value for money, but also how it has been done through an innovative sustainable procurement that streamlined the supply chain and generated benefits not only for the organisation, but also for the environment. The emergence of a critical problem provided the context and impetus for change, but crucially, senior management buy-in, the capability of procuring professionals to recognise the bigger picture and the existence of a strong buyer-seller relationship provided the necessary conditions for the development of an innovative solution and the creation of an experimental space in which that change could be enacted.

This case provides a number of implications for policy. Firstly, it suggests that sustainable procurement can be best enabled by a systemic and service-oriented approach and by securing a 'space' and certain flexibility to innovate. The closed-loop case has shown that innovation tends to be associated with procurement that is linked to activities with true leverage or critical to the pursuit of strategic objectives of the organisation, able to mobilise senior management and to send a clear and consistent signal to the market. Organisations should therefore focus on strategic purchasing, supported by better cross-government collaboration to enable expertise sharing, cost saving and freeing-up resources in other parts of the government to focus on more strategic issues. Finally, in contrast with the tendency to 'bolt on' increasing objectives to the procurement function, better alignment and prioritisation of objectives should be encouraged on a case-by-case basis depending on what is being procured and its uses, as well as other political and financial constraints and objectives.

Nonetheless, we acknowledge that there are limitations to this study. As a qualitative case, we cannot expect the results to be generalisable to the entire public sector. Indeed, the unique surroundings of the crisis of 2007 provided a critical exigency for this organisation and we cannot expect the same crisis to occur again, nor that the same consequences will be replicated.

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