

New Delivery Model for Non-profit Organisations: Shared Computing Services

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Abstract: The current economic climate of funding stringency has intensified the need for non-profit organisations (NPOs) to find new delivery models of their services as a way of creating greater efficiencies and reducing costs. Consideration of improvement to their back-office operations is one way of addressing overheads associated with delivery functions of NPOs so that they can continue to focus on their core business activities. The overheads for back-office functions are much larger for smaller NPOs (by about 10-15 percent) than the larger ones and interest in sharing services could appeal to that sector. One approach to reduce overhead costs is for two or more NPOs to collaborate in sharing office space and office equipment and, in some instances, outsourcing some functions, for example, human resources and information technology. Currently, in New Zealand, there is very little engagement by NPOs in sharing services, particularly back office computing services. It was against this background that meetings with representatives of eight NPOs in Wellington, New Zealand, identified the challenges they were facing. These included funding, client management, compliance with reporting (financial and non-financial), financial management and control, governance, marketing and promotion and retention and management of staff and volunteers. Wellington City Council, as a significant funding agent of some local NPOs, commissioned an online survey with the aim of understanding the interest and readiness of NPOs in adopting shared computing services. The survey was developed collaboratively with the council, a computing charitable trust and a local university. The objectives of the survey were: to provide a snapshot of computing usage within the organisations, identify significant issues challenging the sector and understand their perceptions of shared computing services. The perceptions of the Wellington region NPO representatives (147 valid surveys) regarding shared services are reported in this paper. Results reveal the factors that drive the uptake of shared services within the non-profit sector, the benefits, barriers and priorities of sharing computing services and respondents' views on their willingness to pay for a shared services arrangement. NPOs were positive regarding potential benefits of a shared services arrangement but recognised potential barriers of privacy and security, a need for contractual relationships, shared vision and compliance and standardisation. Priorities for a proposed shared services model were identified as finance and management of data and knowledge. The majority of respondents indicated they were willing to pay up to five percent of their budget for a shared services arrangement. These results provide a basis for further study as to the type of shared services model that organisations would find acceptable and render efficiencies and cost savings.

Keywords: shared services, non-profit, computing

1. Introduction and background

The challenge of having to do more with less has intensified in recent years with the economic downturn. In the private and public sectors many organisations have turned to shared services in an effort to achieve efficiencies and a reduction in costs through the consolidation of business operations and administrative processes. For the nonprofit sector the changed environment has meant fewer grants and diminishing resources forcing agencies and organisations to consider cost-reduction measures, one of which is moving to sharing services.

Definitions of shared services arrangements vary, depending on the type and manner of sharing. These arrangements are typically centralised and are distinct from outsourcing where services and operations are provided by an independent organisation. Shared services models range from low-cost solutions such as collaboration amongst co-located NPOs (for example, sharing office space and administrative staff) to greater complexity where organisations collaborate in the provision of back office support and increase their buying and purchasing power. Information communications technology (ICT) plays a major role in contributing to economies of scale in many of these areas.

Adoption of shared services has spread within the public and private sectors since the 1990s (Ramphal, 2013) and are evident in large and more complex organisations such as those with multiple business units and revenue over \$2 billion (Schulman, Harmer, Dunleavy and Lusk, 1999). For example, the New Zealand government has mandated a medium-term strategy for "how central government will more collectively lead

the use, development and purchasing of government ICT over the next three years" (New Zealand Government, 2012). The government's focus extends beyond shared services for ICT purchasing and includes alignment and standardisation of agency business applications, integrating workflow across government and improving access to government services and data. Other areas where ICT shared services can be an enabler is in the financial area (accounts payable and accounts receivable) and human resource services (payroll, reporting and accountability).

Literature relevant to implementation of shared services in the nonprofit sector is scanty compared with that relating to the private and public sectors and is mostly based on United States NPOs where the term 'management services organisations' or 'management support organisations' (MSOs) is used (Walsh, McGregor-Lowndes and Newton, 2008). In Australia empirical research on shared services by NPOs is also meagre although some states report initiatives such as pilot projects that include Queensland's multi-tenant service centre project with a focus on co-locating separate service providers in an appropriately located centre (Lennie, 2008). Another example is the IT services provision to the UnitingCare NPO group in Australia, an initiative established by the Uniting Church Queensland Synod (Walsh, et al, 2008). The services respond to a wide range of needs from desktop support, network and datacentre infrastructure to application support and project management services (Naimo, 2011). In New Zealand local government shared services include a diversity of collaborative projects, for example, call centre services, library management systems, business solutions and IT services (Drew, 2011 and Shaw, 2010). However, compared with private and public sector organisations, little is reported on shared services implementation by NPOs in New Zealand.

This paper contributes to the shared services literature, responding to Newton's (2008) comment that the literature lags behind the practice of forming shared services arrangements. We report on the results of an online survey of NPO representatives in Wellington, New Zealand with the aim of understanding respondents' perceptions of shared computing services. The survey results also provided a snapshot of computing usage within NPOs and identified significant issues challenging the sector. In the next section we briefly discuss characteristics of NPOs and the different shared services models. Next is a discussion on factors relevant to shared services adoption followed by a description of the study's initiation, method and sample. Results are then presented followed by a summary and reflections.

2. Models and characteristics

The adoption of a shared services model is dependent, in part, on the characteristics of the NPO. Organisations that are complementary, have synergies, a similar philosophy, share a common vision, goals and focus and are not competing with each other are more likely to be successful in adoption of shared services (Lennie, 2008). The range of shared services models is broad, each with benefits and limitations. Walsh et al (2008), after an investigation of the literature, review five models in the non-profit sector, each of which has different features. For example, the Classical Business Model which the authors note is not particularly common, is where a separate shared services provider brings together the business functions previously performed by separate business units within the organisation. The Dedicated Shared Services Centres involves a separate organisation or entity that is sub-contracted to perform specific functions. Walsh et al warn that there could be taxation implications with this approach. The Peak Body Support Model is useful within a particular sector or industry and in return for a membership or subscription fee provides a range of services for members. Sharing common premises, resources and facilities is the main feature of the Co-location Model. Walsh et al provide several Australian examples where this model has been implemented and believe there is potential for extending it to shared services. Finally, the Amalgamation or Merger Model is where administrative functions are streamlined and consolidated by organisations in a similar field of service amalgamation, thus forming a single larger organisation.

A background paper on shared services for non-government organisations by the Council of Social Services of New South Wales (NCOSS 2008) suggests additional models that include Outsourcing to a Specialist Provider and Group Buying Schemes (among others) (see <http://ncoss.org.au/content/view/1498/111>). There is consensus that one size does not fit all and for NPOs that deal with a "whole other realm of issues" in comparison to private and government sector counterparts Naimo (2011), identifying the type of model that may be suitable requires time and negotiation. The different models, at times the bewildering possibilities of what to share, as well as the need for trust and negotiation within a collaborative arrangement are among the factors needing consideration in a decision to adopt shared services.

3. Factors for consideration in shared services adoption

The main rationale for initiating a shared services arrangement is identified by Becker, Niehaves and Krause (2009) as “cost pressure”, the financial imperative of having to do more with less. Their model of causal relationships, derived from their case study of two German local bodies where shared services projects were implemented, includes two “necessary conditions”, namely key actors who champion the initiative and second, the existence of prior cooperation. Vangen and Huxham, (2003, p. 8) note “Trust is an essential ingredient for successful collaboration” and Becker et al (2009) believe that collaboration and cooperation between administrations, accompanied by collaborative communication and decision-making contribute to “trustful cooperation during shared service delivery” (p. 118).

The assumption that “trust levels start small and gradually increase” (McKnight, Cummings and Chervany, 1998, p. 473) is challenged by McKnight, et al, citing researchers of survey and experimental studies who found high trust levels of their subjects at initial and early stages. Hence, it is possible that NPOs interested in implementing a shared services model could achieve a shared arrangement with organisations with whom they have previously had little contact but have a good reputation. However, McKnight et al propose that initial trust is more likely when “the trusted party has built a widely known good reputation” (p. 486).

An NPO that has already established trustful relationships, within the geographical area of NPOs interested in collaborating in a shared services arrangement is likely to be suitable as one of the “key actors”. Seddon (2008), a leading critic of management fads, notes that “command-and-control consultancies” where decision-making is taken out of the organisations’ hands does not work. His recommendations that focus on local government (but are equally applicable to NPOs) is to find a “better way”. That is, to “check” in situ for services that might be shared, to improve them where they are and then, on the basis of the knowledge gained, to determine whether and how to go about sharing them.” (p. 186). NPOs considering shared services implementation would do well to heed Seddon’s criticisms, particularly as they relate to what is being measured and included in evaluations of shared services.

Holistic evaluation of a shared services project is critical for assessing effectiveness and efficiencies. Seddon (2008) provides a strong critique of centralising shared administration. He notes that much administration work is part of a service flow and centralising the work “creates waste (handovers, rework, duplication), lengthens the time it takes to deliver a service and consequently generates failure demand” (p. 57). Seddon criticises Varney’s 2006 report in which UK local authorities shared-service centres are cited as “exemplars” in their shared service arrangements. When Seddon visited the authorities he found no “proper evaluation of the change to the quality of services ... and no information about the cost effectiveness of the initiative” (p. 149). He doubted that if those involved had no evidence then Varney would be unlikely to have had information about the cost-effectiveness of the initiative.

Dollery et al’s (2009) examination of shared services in local government both internationally and in Australia concluded with a “modest conclusion [that] thoughtful selection and application of shared services arrangements would almost certainly induce cost savings [but] it could not by itself solve the acute problems of financial sustainability confronting a majority of Australian local councils” (p. 218). Triplett and Scheumann (2000) stress the criticality of having a “thorough understanding of costs and the ability to impact those costs” (p. 42) for the success of any shared service centre.

4. Initiation, method and sample

The decision to investigate the perceptions of NPO representatives was made after meetings with representatives of eight Wellington NPOs who identified the following challenges they were facing in meeting the pressures of a tight-funding environment:

- funding
- client management
- compliance with reporting (financial and non-financial)
- financial management and control
- governance
- marketing and promotion
- retention and management of staff and volunteers.

Wellington City Council, as a significant funding agent of some local NPOs, commissioned Wellington ICT (charitable trust) to develop and administer an online survey, in collaboration with Massey University. The aim was to understand the interest and readiness of NPOs in adopting shared computing services. The objectives were to:

- identify major concerns currently affecting organisations and possible contributions/role of ICT in resolving these
- gain NPO employees' perceptions of shared ICT services
- identify potential components/priorities in the shared services model

The survey was tested by trustees of Wellington ICT and feedback incorporated into changes in survey questions. The final version was then uploaded to Survey Monkey and remained open for four weeks. Multi-item scales were used, as single-item measures are deficient both with respect to validity and reliability. Respondents were asked to rate the extent to which they agreed with different statements on a five point Likert scale from 1= Strongly Disagree to 5 = Strongly Agree as the anchor points.

Responses to Part B of the survey relating to the perceptions of shared services by the Wellington region respondents (147 valid surveys) are reported in this paper. Respondents indicated their organisation size by selecting one of four organisational categories, namely, Large NPO with several paid staff plus volunteers (LNP), Small NPO with paid staff and volunteers (SNPFS), Small NPO with less than two paid staff and volunteers (SNP<2PS) and Entirely Voluntary Organisation (Vol).

The Statistical Package for Social Sciences (SPSS) was used for data analysis that included the means and Analysis of Variance ANOVA tests. One way Anova is the appropriate analytical technique to use when comparing the means of three or more groups. The statistic associated with ANOVA is the F-statistic or the F-value, which also has a corresponding p-value. From a statistical point of view, if the p-value is less than .10, then the results are "statistically significant". The p-value also indicates the degree of confidence with which you can say that the observed phenomenon is true. For example if p = .05, then we can be 95 % confident that the observed phenomenon is true; if p = .10, then we can be 90 % confident that the observed phenomenon is true; if p = .01, then we can be 99 % confident that the observed phenomenon is true. A statistical significance of p<.10 is used in this analysis and when p-value is <.10, the differences between the means of the groups are statistically different. This implies that there are genuine differences between the groups.

4. Discussion of results

This section presents respondents' perceptions of the potential for a NPO shared services arrangement.

4.1 Drivers of shared services

There was agreement by all organisations on current concerns that drive a potential shared services arrangement within the sector (see Table 1). The highest total mean (3.81) was for the item that indicated that organisations wished to "focus resources on actual service delivery" The two statistically significant (p = .06 and p = .04 respectively) items: refer to pressure from government funding agencies and a preference by funders for larger organisations which are seen to be more cost effective.

Table 1: Factors that Drive Shared Services within the Sector

Drivers of Shared Services	LNP	SNPFS	SNP<2PS	Vol	Total
There is pressure from government funding agencies to achieve economies of scale within NGO programs	3.79	3.83	3.48	3.40	3.64
Funders are preferring larger organisations which are seen to be more cost effective	3.15	3.63	3.61	3.16	3.38
There is increasing contract and compliance costs relative to funding	3.75	3.72	3.48	3.44	3.61
More skilled employees are needed to meet increasing compliance, ICT, contract, and other demands	3.64	3.63	3.43	3.23	3.48
Recruiting and retaining workers in the sector is becoming more challenging	3.06	3.29	3.52	3.23	3.26
Clients have changing needs and we want to provide more	3.70	3.77	3.65	3.33	3.61

coordinated and consistent range of services					
We want to focus resources on actual service delivery rather than back-office or administrative systems	3.56	3.88	4.00	3.81	3.81

4.2 Potential benefits

As can be seen in Table 2, all organisations agreed that there were potential benefits of a shared services arrangement. No items were statistically significant.

Table 2: Potential Benefits of Shared Services

Potential Benefits	LNP	SNPFPS	SNP<2PS	Vol	Total
Shared services results in savings as cost is shared among users	3.58	3.77	3.52	3.63	3.65
Shared services provides expert service/concentration of specialist skills	3.58	3.81	3.61	3.70	3.69
Shared services facilitates better knowledge sharing and collaboration	3.58	3.75	3.48	3.72	3.66
We are assured of consistent and reliable service levels at all time	3.13	3.31	3.00	3.38	3.24
Shared services allows standardisation of systems and processes without losing your identity as an organisation	3.48	3.62	3.52	3.58	3.56
There is a low system maintenance	3.18	3.50	3.48	3.53	3.44
Shared services streamlines accountability and reporting requirements	3.36	3.46	3.52	3.33	3.41
For small NFPs shared services reduces risks	3.42	3.31	3.52	3.47	3.42
Shared services encourages and can eventually lead to accreditation and compliance	3.45	3.38	3.26	3.42	3.39

4.3 Barriers

Table 3 identifies the items that organisations regard as barriers to shared computing services. Two items of these items: privacy, control and confidentiality and need for contractual relationships are statistically significant.

Table 3: Barriers to Shared Computing Services

Barriers	LNP	SNPFPS	SNP<2PS	Vol	Total
Privacy, control and confidentiality	3.85	4.19	3.52	3.79	3.89
Security	3.88	4.13	3.59	3.79	3.89
Need for contractual relationships	3.61	3.75	3.17	3.74	3.63
Compatibility with other organisations and need for a shared vision	3.91	3.94	3.70	3.79	3.85
New systems of communication, management, administration and networking	3.78	3.79	3.39	3.93	3.77
Need for compliance and standardisation	3.61	3.75	3.57	3.72	3.68
Initial costs and investments	3.82	3.63	3.96	3.98	3.82

5.4 Priorities

Organisations agreed they would want to share most services (see Table 4). However all organisations indicated they would not wish to share customer relationship management. The LNP did not want to share reporting and accountability. The two items: Human resource/employer-employee relationship management and finance were statistically significant ($p < .10$).

Table 4: Shared Services Priorities

Shared Services Priorities	LNP	SNPFPS	SNP<2PS	Vol	Total

Human resource/Employer-Employee relationship management	3.09	3.36	3.17	2.76	3.10
Finance (accounting/budgeting)	3.00	3.50	3.39	3.56	3.39
Customer relationship management	2.84	2.96	2.87	2.88	2.90
Project and resource management	3.13	3.36	3.22	3.33	3.27
Reporting and accountability	2.21	3.61	3.30	3.22	3.36
Fundraising	3.06	3.53	3.52	3.58	3.44
Data and knowledge management	3.27	3.50	3.22	3.45	3.39

4.5 Willingness to pay

Table 5 reveals that majority of the organisations indicated that they believed shared services would be useful and that they would be willing to pay up to 5% of their budgets. The voluntary organisations tended to disagree (49%) but 77% were willing to pay.

Table 5: Usefulness and Willingness to Pay for a Shared Service Arrangement

Organisation Category	Would Shared Service be Useful?		Willing to pay up to 5% budget	Willing to pay up to 10% budget
	Yes	No		
Large NPO	58% (19)	42% (14)	80% (16)	20% (4)
Small NPO with a few paid staff	63% (30)	37% (18)	78% (29)	22% (8)
Small NPO < 2 paid staff	65% (15)	35% (8)	72% (13)	28% (5)
Voluntary organisation	49% (21)	51 (22)	77% (27)	23% (8)
Total	58% (85)	42% (62)	77% (85)	23% (25)

5. Conclusion

5.1 Summary of results

All organisations agreed that there were potential benefits of shared services to provide expert service and concentration of specialist skills as well as savings and facilitation of better knowledge sharing and collaboration. Organisations were unanimous that there were barriers to a shared services arrangement and these were identified as: privacy, control and confidentiality; need for contractual relationships; the need for a shared vision, compliance and standardisation; new systems and security.

Strongest agreement by all organisations was for prioritising finance (accounting/budgeting) and data and knowledge management. None of the organisations indicated customer relationship management as a priority and the large organisations disagreed that reporting and accountability was a priority for shared services. Finally, the results show that organisations believe they would benefit from a shared services arrangement but the majority would not be prepared to pay more than five percent of their budget.

5.2 Limitations

A limitation of this study related to the number of shared services questions within the survey. The survey had two parts, the first related to the funder's interest in ascertaining ICT usage of NPOs and the second included questions relating to shared services. As we were mindful of keeping the survey to an acceptable length so that the time respondents invested in completing the survey was not too long, we limited the number of questions. This meant that while we gained a broad overview of the perceptions of NPOs which showed their interest in the new delivery mode, the results raised further questions. This raised a further limitation associated with the nature of surveys in that they do not reveal the deeper insights which a qualitative approach can do. Therefore we recommend a follow-up study that uses in-depth interviews, prefaced by a presentation of the different models of shared services arrangements to elicit further information.

5.3 Reflections

There is increasing pressure from local government funding agencies to achieve economies of scale within NPO programmes. In Wellington's case the city council was sufficiently interested to fund this exploratory survey as they perceived that shared services offers a solution to these organisations. However barriers to adopt shared services remain. We therefore need to explore ways in which these barriers can be overcome. The council could take the lead and work with these NPOs, possibly through the auspices of Wellington ICT, a NPO the council has supported in earlier digital divide projects. The organisation already runs the computing hubs in the council's housing estates, has run a successful WebRider programme where NPOs have been assisted with Web site development and has had working arrangements with ICT companies in the private sector.

Through collaboration and cooperation with many other NPOs, Wellington ICT has built, and enjoys 'trustful' relationships, an important attribute in a shared services arrangement. A further benefit is that Wellington ICT is a local NPO, is therefore "in situ" (Seddon, 2008) and familiar with the sector. A major advantage of being "in situ" is that the specific values and origins of NPOs interested in a shared services approach can be carefully focused upon, without which any shared service arrangement is likely to be carried out poorly (Arsenault, 2008). Wellington ICT, as one of the "key actors" could assist with decision-making, another favourable aspect that Seddon (2008) believes helps when it remains within organisations' hands.

Before launching a shared services initiative any NPO considering collaborating in a shared arrangement needs to have a clear idea of the functionalities they believe would build economies of scale and thereby reduce cost and/or improve the quality of some functions. There is a wide range of areas where shared services arrangements may apply and different models of how such an arrangement works. Through cooperation and collaboration identification of areas for potential efficient can be made and appropriate model agreed. McLaughlin (1998) and Arsenault (1998) identify cooperation and collaboration among NPOs as not only a "good value" but one that will be a necessity in the future.

Any implementation should include evaluation, formative as well as summative, following Seddon's (2008) argument that such evaluations should be holistic; that is, the entire work-flow, rather than a particular task, should be measured to assess whether efficiencies, effectiveness and savings have been achieved.

Finally, the results of this study were presented at a public meeting in the council offices late 2012 and generated considerable interest by those present. Attendees recommended following up the study with focus groups and interviews to explore different shared services models but so far little progress has been made. With careful consideration and planning shared services could reduce costs but the functionalities, workflow and trustful relationships need attention.

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References

- Arsenault, J. (1998) *Forging Nonprofit Alliances*, Jossey-Bass, San Francisco.
- Becker, J., Niehaves, B. and Krause, A. (2009) "Shared Service Center vs. Shared Service Network: A Multiple Case Study Analysis of Factors Impacting on Shared Service Configurations", [online], http://link.springer.com/chapter/10.1007/978-3-642-03516-6_10#page-1
- McKnight, D.H., Cummings, L.L. and Chervany, N.I. (1998) "Initial Trust Formation in New Organizational Relationships", *Academy of Management Review*, Vol 23, No. 3, pp. 473-490.
- Dollery, B., Akimov, A. and Byrnes, J. (2009) "Shared Services in Australian Local Government: Rationale, Alternative Models and Empirical Evidence", *The Australian Journal of Public Administration*, Vol 68, No. 2, pp 208-219.
- Drew, C. (June, 2011) Shared Services for Local Government, Local Government New Zealand, Wellington.
- Lennie, J. (2007) "Challenges and Strategies for the Sustainability and Viability of Non-Profit Multi-Tenant Service Centres: A Literature Review", [online], <http://legacy.communitydoor.org.au/documents/strengthening/collaboration/mtsc-literature-review.pdf>.
- McLaughlin, T.A. (1998) *Nonprofit Mergers and Alliances*, Wiley Nonprofit Series, New York.
- Naimo, G. (2011) "The Not For Profit Sector and Shared Services", [online] <http://www.slideshare.net/iqpcustralia/qa-with-greg-naimo-the-not-for-profit-sector-and-shared-services>.

- NCOSS (2008) "Shared Services in the NGO Sector Background Paper", [online], <http://ncoss.org.au/content/view/1498/111>
- Newton, C. (2008) "Shared Services in the NGO Sector: Lessons we can learn from other sectors", [online], <http://ncoss.org.au/content/view/1498/111>
- New Zealand Government (2012) "Directions and Priorities for Government ICT", [online], <http://ict.govt.nz>.
- Ramphal, R. (2013) A Literature Review on Shared Services, *African Journal of Business Management*, Vol 7, No. 1, pp. 1-7.
- Schulman, D.S., Harmer, M.J. Dunleavy J.R. and Lusk, J.S. (1999) Shared Services: Adding Value to the Business Units, John Wiley and Sons Inc. New York.
- Seddon, J. (2008) *Systems Thinking in the Public Sector: The Failure of the Reform Regime... and a Manifesto for a Better Way*, Triarchy Press, Axminster.
- Shaw, J. (2010) "Shared Services in New Zealand Local Government 2010", Paper read at ALGIM Annual Conference, Wairakei, New Zealand, November.
- Triplett, A. And Scheumann, J. (2000) Managing Shared Services with ABM, *Strategic Finance*, p. 40-45.
- Vangen, S. and Huxham, C. (2003) "Nurturing collaborative relations: Building trust in interorganizational collaboration", *Journal of Applied Behavioral Science*, Vol 39, No. 1, pp . 5-31
- Walsh, P., McGregor-Lowndes, M. and Newton, C.J. (2008) "Shared Services: Lessons from the Public and Private Sectors for the Nonprofit Sector", *The Australian Journal of Public Administration*, Vol 67, No. 2, pp 200-212.