

12-2013

## Charities and ICTs: Can IS-enabled Innovation in Business Critical Activities Be Delivered?

Eleanor Burt

*St. Andrews University - U.K., eb19@st-andrews.ac.uk*

J.A. Taylor

*Caledonian Business School, Glasgow Caledonian University, and University of Nottingham*

Follow this and additional works at: <https://aisel.aisnet.org/cais>

---

### Recommended Citation

Burt, Eleanor and Taylor, J.A. (2013) "Charities and ICTs: Can IS-enabled Innovation in Business Critical Activities Be Delivered?," *Communications of the Association for Information Systems*: Vol. 33 , Article 12.

DOI: 10.17705/1CAIS.03312

Available at: <https://aisel.aisnet.org/cais/vol33/iss1/12>

This material is brought to you by the AIS Journals at AIS Electronic Library (AISeL). It has been accepted for inclusion in Communications of the Association for Information Systems by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# Communications of the Association for Information Systems

CAIS 

## Charities and ICTs: Can IS-enabled Innovation in Business Critical Activities Be Delivered?

Eleanor Burt

*School of Management, University of St Andrews*

*eb19@st-andrews.ac.uk*

J.A. Taylor

*Caledonian Business School, Glasgow Caledonian University, and University of Nottingham*

---

### Abstract:

This article looks at the ways in which a number of charities are leading the United Kingdom's 'Third Sector' in their use of ICT/IS capabilities to deliver innovations in a range of business critical activities. It shows that new ICT/IS capabilities afforded opportunities within different types of charities to deliver change. In the older charities established in the 'pre-Internet' era, these shifts tend to work with and reflect the existing 'enterprise logic' or established 'ways of doing'. In the younger 'Net generation' organisations, the shifts tend to be more fluid in nature, enabling the delivery of new ways of doing and denoting the more flexible model of organisation upon which they were founded. Our research also shows that, in all of the charities, information and data capture and interrogation are intensifying.

**Keywords:** charities, nonprofits, information and communication technologies, information systems, organisational innovation

Volume 33, Article 12, pp. 205-224, December 2013

The manuscript was received 07/09/2012 and was with the authors 4 months for 2 revisions.

### I. INTRODUCTION

This article sets out evidence regarding how a group of charities based in the United Kingdom (UK) are using information and communication technologies (ICTs), including the Internet, to deliver information systems (IS)-enabled changes in core areas of their businesses. Whilst the charitable sector has become a vital actor in contemporary society today, there is a dearth of data that shows how these organisations are developing capabilities in keeping with the opportunities afforded by ICTs. To redress this situation, the Nominet Trust, the charitable arm of Nominet, the .uk Internet domain name provider, commissioned us to review how UK charitable organisations were using ICTs. The Trust's objective in commissioning the study was to identify how charities were using ICTs to deliver changes in core areas of their businesses. In this way, the Nominet Trust aimed to encourage more charities to consider ways in which they, too, might innovate using these technologies.

For the purposes of the research reported here, we interpret the term 'charity' in its broadest sense, roughly equivalent to the USA's concept of non-profit organisation. In the UK the word 'charity', in its strictest sense, denotes a particular legally recognised form of voluntary organisation. For this research, and along with our funding body, we took the broader view of using the term to denote voluntary organisations in general, including charities, which together make up what in the UK is referred to as the 'Third Sector'. The case study selection criteria that we set out below led us to organisations that were also registered charities.

Data on the charity sector, developed from the 1990s onwards, show this to be a significant group of organisations in both the UK and USA. Figures from the National Council for Voluntary Organisations (NCVO) in the UK [2012], show that in the period 2009–2010 the UK charitable sector recorded a gross income of £36.7 billion (\$59 billion). The same source shows that in 2011, membership of the three main environmental organisations in the UK exceeded 3.5 million people and that in the same year 65 percent of the population of the UK was engaged in volunteering. The UK sector's contribution to GDP has been variably calculated as 4.8 percent [Salamon and Anheier, 1994] and from 0.67 percent to 0.72 percent [Hems and Passey, 1998]. In the USA, too, similar data reveal this sector's gathering contribution to the economy. In 2008, more than 1.5 million charities were registered with the Internal Revenue Service [Wing, Roeger, Pollack, 2010], whilst circa 600,000 charities whose individual gross receipts were in excess of \$25,000, aggregated more than \$1.9 trillion in revenue. The estimate of the value of volunteer time in the same year is estimated as \$279 billion. In 2007, the USA the sector's contribution to GDP was in excess of 5 percent [Pollack and Blackwood, 2007].

Charities touch every aspect of life from 'cradle to grave' [Salamon and Anheier, 1994; Deakin, 1996]. They provide a focal point for social capital formation [Putnam, 2000], enabling citizens to come together for mutual benefit, to volunteer, and to engage in recreational and other social activities. Their provision of services to vulnerable citizens on the periphery of society, whose needs are not met by government or private business, is of vital importance. So, too, is their role in employing people who, for reasons of disability or other circumstances, are 'excluded' from the mainstream labour market [Deakin, 1996]. They provide a 'voice' for citizens who are marginalised within the democratic process, advocating and campaigning on their behalf [Deakin, 1996]. In the UK, the latter stages of the twentieth century and the first decades of the twenty-first century have seen them play a growing role in the design and delivery of public services [Kendall, 2000]. In all their roles, as charities compete for increasingly scarce resources, they are seeking ways to enhance their effectiveness. As we show below in our case study descriptions, this search is manifesting in new inter- and intra-sectoral collaborations, new approaches to organisational design and resource utilisation, and major shifts in information gathering and applications.

Clearly ICTs, including the Internet and related technologies, play a crucial role in enhancing organisational capabilities. Research that we undertook in the late 1990s under the Economic and Social Research Council's Virtual Society programme—and which was breaking new ground at that time—showed that, of the 366 organisations responding to our survey, only a little more than one-third had 96 percent or more of their PCs networked [Burt and Taylor, 1999, 2000]. Moreover, the highly autonomous branch structure found in many charities meant that this networked capacity was highly concentrated within the headquarters or a small number of branches, with the majority of branches having no networked computing. Furthermore, only 9 percent of the charities were using ICTs to support marketing activities, while as few as 7 percent were sharing data electronically with external organisational partners. The survey data also showed notable exceptions to the overall low levels of engagement in the form of a small number of 'exemplary' organisations that were purposefully using networked ICTs to bring about performance-enhancing innovations. A panel of experts that we brought together in this new research study for their

informed view of the sector's engagement with ICTs [see Section III] were of the view that the same 'leaders and laggards' configuration that we found a little more than a decade earlier holds firm today. Thus, while there was consensus within our expert panel that even the very smallest charities are now using ICTs to some extent, there was also shared agreement that very few charities are using the Internet and related technologies to deliver innovations in the way they operate and deliver services.

In the sections that follow, first, we set out the theoretical perspectives and concepts that have informed our study (Section II); we then set out our research methods in Section III; our findings are in Section IV in the form of 'case studies' of the charities that we examined, and we present our conclusions in Section V.

## II. THEORETICAL FRAMEWORK

In this section, we set out the theoretical ideas and concepts that have informed our study. We have drawn on existing theory and concepts both to aid our selection of charities for empirical examination and in analyzing our research findings. Using theory in this way is an established approach when the purpose is not to support or reject a theoretical proposition, but to gain deeper understanding of a situation [Schofield, 2000].

### Criteria for Selection

The questions that we were examining (above) were pre-eminently about change, or lack thereof. Institutional theorising [DiMaggio and Powell, 1983; Scott, 2001; North, 1990] helps us with insights into change and adaptation in organisations. It draws attention to the ways that longstanding and embedded 'ways of doing' act as inertial forces on organisational change and innovation on the one hand, while showing, too, that as organisations respond to new external and internal imperatives, change becomes possible. As charities have been shown to be particularly prone to institutionalist tendencies [Frumkin and Galskiewicz, 2004], an institutionalist perspective was especially relevant.

From the perspective of institutionalism, the three oldest charities in our selection—the *St John Ambulance Foundation* established in the nineteenth century, the *Royal National Institute for the Deaf* (now known as *Action on Hearing Loss*), and the *British Heart Foundation* established during the early and mid-twentieth century respectively—have existed long enough to have established 'ways of doing' that become so firmly embedded as to act as significant constraints upon the delivery of innovation and change. One deeply cherished 'rule' that, over time, becomes both 'institutionalised' and a defining aspect in the organisational arrangements, or its 'enterprise logic' [Zuboff and Maxmin, 2004; DiMaggio and Powell, 1983; Scott, 2001; North, 1990], of some charities that deliver services through a network of local branches, is that very high levels of decision-making and operational autonomy are granted to the branches. Other long-established behavioural norms and routines may lead to relationships between charities tending to be of a competitive rather than a collaborative nature. An institutionalist perspective would lead us to expect that change in the older charities will be more in the form of augmenting existing organisational arrangements, whereas in the younger organisations change might take the form of a break with established organisational and institutional arrangements.

*St John Ambulance Foundation*, the *Royal National Institute for the Deaf*, the *British Heart Foundation* were also of interest because of their complex multi-locational organisational forms. *The Family Holiday Association*, *YouthNet*, and *See the Difference*, were chosen to provide us with insights into how smaller, differently formed, more flexible organisations, with simpler structures, were adapting and giving emphasis to more collaborativist and networked models of organisational change and service delivery, respectively [Fuchs, 2008; Goecks, Volda, Volda and Mynatt, 2008; Castells, 2000]. From an institutionalist perspective, large, complex charities in which norms and other arrangements have become 'bureaucratized' are less likely to be innovative than smaller organisations of simpler forms are.

Also in keeping with institutionalist thinking, is the concept of 'affordance' [Conole and Dyke, 2004; Salomon, 1993]. Whilst the concept of affordance is used in somewhat differing ways in other scholarly communities (see, for example, Leonardi, 2011) here from an institutional perspective it allows us to argue that while technologies and, indeed, other variables such as leadership changes or contractual relationships and requirements, do not determine change, they do open up opportunities and choices in the ways that organisations are able to respond to shifting environmental imperatives, including social expectations and economic conditions. These choices may lead organisations such as charities to reject or adopt particular options available to them. Once an institutionalist view is taken, we can see how new informational and communications opportunities might collide with existing practice to the point at which they will not be adopted. Equally, new information and communications resources may be used to confront these institutional constraints, enabling the delivery of a 'new enterprise logic' manifest in altered organisational rules, norms, and behavioural repertoires and routines [Zuboff and Maxmin, 2004; DiMaggio and Powell, 1983; Scott, 2001; North, 1990]. Thus, for example, we may see charities that historically have operated with high levels of autonomy at the branch level, shifting from an embedded and traditional enterprise logic to a new one

that reconstitutes the headquarters–branch relationship. We may see charities that have tended to deliver their services in isolation from other organisations now developing an enterprise logic that draws upon cooperative or collaborative arrangements. We know that in the modern capitalist economy external conditions that include changing consumer expectations and the development of a more intensely competitive environment are driving businesses as well as public bodies to look at how they can better exploit the Web to raise their profile, better understand and satisfy their customers, and improve their performance [KANA, 2013]. And so it is, too, with charities. The ‘anticipation’ of customer requirements, the offering of value-added ‘personalised’ services reflecting individual preferences, and the ‘seamless’ delivery to the customer of services that may involve a network of organisations, are seen to be key features in this new business landscape. The charities whose case studies we set out below also provide insights into the ways in which the enterprise logic is shifting both for long-established organisations whose origins predate even the early mainframe computing era, to newer charities such as the *Family Holiday Association* and *YouthNet*. Though each of these latter charities experienced early exposure to the rapid series of post-mainframe paradigm shifts associated with computer networking and the evolving affordances of the Internet, established almost two decades apart, the *Family Holiday Association* and *YouthNet* are ‘pre-Internet’ and ‘Net-generation’ charities, respectively. For the most recent of our case studies we look to a charity, *See the Difference*, founded explicitly upon an enterprise logic whose rationale lies directly and explicitly in new media support for other charities, in keeping with so-called Web 3.0 [Fuchs, 2008; Kroeker, 2010; Cuesta, 2012].

### Analytical Framework

A common failing in studies looking at ICTs and organisational change is the assumption that change is inherent in the technological environment faced by organisations to the point at which it cannot be avoided. Put a different way, there is too often a deterministic view associated with change, especially where the technological environment is changing profoundly. Institutional theorising helps us avoid such deterministic simplicity because of the way it takes account of the settled organisational arrangements and the external environmental conditions that inevitably filter approaches to the adoption of changing technologies. Thus, and drawing on Zorn, Flanagin, and Shoham [2011] in analysing our research findings, we engage with three sets of influences shaping the sector’s relationship with ICTs that we label organisational dimension (e.g., forms of organisation, leadership style), environmental dimension (e.g., consumer expectations, competition for resources, technological developments), and institutional dimension (e.g., age, norms, embedded practices). While it is helpful to separate these conceptually for analytical purposes, in practice of course, they are intersecting. Importantly, within the small scale of this study, drawing on these sets of influences meant that we were able to explore how ideas associated with organisational adaptation and change and, with key technological developments, were manifesting within charities in ways that were differently nuanced, and to understand why this was so.

### III. RESEARCH DESIGN

As indicated in Section I (above), the Nominet Trust commissioned the research reported here so as to identify how charities were using ICTs to deliver changes in core areas of their business. Questions of specific interest to Nominet were, are charities harnessing ICTs in ways that keep them relevant to contemporary society [Dutton and Blank, 2011]? Are long-established charities engaging with the Internet and related technologies in ways that are challenging embedded organisational practices? Are there charities in which ICTs are essential in the delivery of mission? In order to examine these questions, the research design incorporated the elements set out below.

The research began with a literature review, which continued throughout the period of the study. The second key component involved establishing and interviewing an expert panel. This was followed by the third key component of the inquiry, the development of organisational case studies. On conclusion of the case study stage, in the fourth key stage of inquiry, the expert panel members were brought together with the interviewees from the case study charities, to form a focus group. We say more about the composition and use of the expert panel, case studies, and focus group below. The final element of the inquiry was the reporting of the research findings.

Completed between 1 March and 31 May 2011, the research was designed so that time-scale and budgetary constraints were used to best effect, and with the aim of generating sound insights of utility to both academic scholars and the practising managers that Nominet regarded as key ‘beneficiaries’ of the study.

The research that we undertook in 1997–1999 employed stratified random sampling and a detailed survey questionnaire both to evaluate the nature and extent of ICT use within the sector and to identify charities that were innovating using ICTs [Burt and Taylor, 1999, 2000], with six being selected for further case study analysis (see Section I, above). The constraints associated with the new research precluded this type of evaluation of the extent and nature of ICT use within the sector and representative sampling of this sort. Our strategy, therefore, was to adopt a tried and tested method employed by social scientists within the qualitative tradition in the form of an expert panel. Thus, we drew on a panel of experts whose vantage points within the Charity Technology Trust, the Society

of IT Managers [SOCITM] Third Sector Forum, the Charities' Security Forum, the Charity ICT Consortium Members Group, IT4Communities, the London and Social Services Alliance [LASA], and the National Council for Voluntary Organisations' ICT Foresight Panel meant that they had direct and close experience of the sector's ICT engagement. Together, these infrastructure organisations provide specialist ICT training, advisory and other forms of support to the UK charitable sector, from the small community-based organisations to the largest international organisations. They also advise Government on the sector's ICT capacity and capabilities. The fine-grained, first-hand, insider knowledge of these 'expert witnesses' [Llewellyn and Northcott, 2007; Jonson and Jehn, 2009] meant that they were able to offer an informed evaluation regarding the extent and nature of the UK charitable sector's engagement with ICTs. Importantly, too, they had the detailed knowledge of individual charities required to identify charities that met the sampling criteria that we set out in Section II above. Thus, the charities selected as case studies were those that, in the view of the expert panel, met the key points of contrast that we required. First, they included 'old', traditional charities and 'younger', more modern charities, including Internet-based organisations. Second, they included charities with complex and well-established bureaucratic organisational forms and charities with simpler and less-established organisational forms.

The case study stage of the research was based upon interviews with senior managers whose positions within their organisations, as chief officers and as IT professionals, ensured that they, too, brought particularly perceptive and relevant insights and overviews to bear [Llewellyn and Northcott, 2007; Jonson and Jehn, 2009]. Semi-structured in-depth interviews of ninety minutes average duration were followed by shorter follow-up interviews as required. The interviews were designed so as to explore how the environmental, organisational, and institutional dimensions (as set out in Section II above) were manifest within these charities. Thus, the information gathered during the interviews was in the form of background information about the organisations themselves, the challenges, and the opportunities with which they were engaging internally as well as externally how existing practices were being changed and new 'ways of doing' delivered, and how they were engaging with ICTs in meeting these challenges and opportunities. Both researchers were present at each interview. The researchers also drew on supplementary in-house documentation. This included material that was publicly available on the organisations' websites and material that was made available to them on the understanding that it was not to be placed in the public domain and was to be regarded as confidential. On completion of the case studies, interviewees were invited to review the draft case studies for factual accuracy and points of clarification.

The qualitative nature of the inquiry meant that we were not measuring data garnered from the case studies, but drawing inferences from it with regard to how the enterprise logic was shifting in the charities examined. For consistency, this approach was also followed in relation to the analysis of related features such as norms and embedded practices. Furthermore, as our objective was to understand the inter-relationships among the organisational, environmental, and institutional dimensions, and their influence on change within the organisations, rather than disaggregating and coding the data, our approach was to use the three dimensions as a 'thematic organising framework'. Appropriate within qualitative inquiry, this approach enabled inter-relationships within and across the dimensions to be identified or inferred and understood 'holistically' in their context.

Feedback that we received from the focus group used to evaluate the 'trustworthiness' [Lincoln and Guba, 1985; Gomm, Hammersley, and Foster, 2000; Schofield, 2000] and 'dependability' of the research design and analysis and to comment, too, on the 'transferability' of the findings, gives us confidence in the robustness of the research design and findings. (Trustworthiness, dependability, and transferability are appropriate concepts when employing a qualitative research methodology. The quantitative 'inequivalents'—validity, reliability, generalisability—are often inappropriately applied in this context, however.) Our confidence in the robustness of the research design and findings has been reinforced subsequently in the form of undocumented feedback received in the course of practitioner and academic conferences.

#### IV. KEY FINDINGS

In this section of the article, we look at how the charities we examined are exploiting technological affordances to support the delivery of IS-enabled changes in the enterprise logics of core business areas. In doing this, in each case study we draw on the analytical framework set out in Section II comprising organisational, environmental, and institutional dimensions. We then add a further short section that summarises the challenge to the 'enterprise logic' [Section II] that has been experienced in each of these cases.

##### St John Ambulance Foundation

###### Organisational Dimension

Founded in the nineteenth century, the *St John Ambulance Foundation* [England] (SJAF) was the oldest and most structurally complex of the six charities that we examined. In the form of a federation of organisations bound together by their shared mission, its services are delivered through eight regional divisions, and one islands division.

Each division comprises a number of area units, which further subdivide into a number of local units. Located within the North West of England, *St John Ambulance Lancashire* (SJAL), the regional body that is our focus here, itself comprises forty-seven local units.

The SJAF is highly dependent on some 45,000 volunteers and the 4 million hours of time that they donate annually to deliver services on a 24/7/365 basis. The SJAL has upwards of 1000 volunteers, contributing in excess of 51,500 hours of time in 2009. Managing volunteers on these scales is a considerable task, particularly as many of the volunteers have full-time jobs. The range of services provided by SJAF and SJAL add a further level of complexity. Amongst the services that volunteers provide are (emergency) first aid at everything from local sports days to major sporting events such as the Olympics, hospital patient transport, routine specimen transportation undertaken within strict time constraints, emergency organ transportation, and providing support to major incidents. Adding to the complexity of the task, volunteers are trained and qualified to deliver different levels of medical support, with some able to administer basic first aid, while others will be authorised to use trauma equipment, for example. Some volunteers will be trained to a level of driving for 'blue light' transportation in the case of an emergency.

*'Within area units there needs to be a high degree of flexibility to deploy volunteers to support scheduled events and other activities, and to re-deploy them at speed in the event of an emergency within the area unit's geographical boundaries'* [Interviewee, 2011]. Area units typically work within their own geographical boundaries; should an event arise, however, that requires a level of volunteer resource beyond the level available within an area, area 'HQs' are able to request additional volunteer resources from neighbouring areas. Similarly, if an incident arises that requires urgent response, *'It can be quicker to deploy volunteers from another area unit whose boundaries make its volunteers geographically closer to the emergency incident than volunteers located within the unit area in which the emergency has arisen'* [Interviewee, 2011]. Offering major incident support in times of national emergency, the SJAF also requires a high level of coordination at country level.

#### Environmental Dimension

The SJAF and SJAL were seeking to manage a number of environmental imperatives and opportunities at the time of our research. First was the pressure, by no means unique to the SJAF and SJAL, to continue to deliver and improve upon an already highly effective set of services and, moreover, to do so during a period when charities, across the sector, were experiencing intensifying competition for diminishing resources. Second, and relatedly, was their considerable dependence on volunteer labour at a time when citizens are grappling with competing and growing demands as employees, in their private and domestic lives, and, therefore, as volunteers also. Third was the recognition that as one of the leading organisations that would be called upon in the event of a national disaster, the charity needed to put in place arrangements that would make it more resilient and able to operate with enhanced effectiveness in the event of an emergency of this magnitude. Fourth were the opportunities offered by both continuing developments in handheld mobile devices such as smart phones which now offer a range of easy to use services, including texting, and growing usage of these among the general population, and, therefore, SJAF's and SJAL's volunteers also.

#### Institutional Dimension

Two deeply embedded and cherished norms within this organisation, and indeed in other charities of similar federated type, are those of autonomy and independence. Thus, while on the one hand shared mission and brand within the SJAF federation are unifying forces that lend purpose, direction, and a framework within which shared and cooperative practices have been able to develop, alongside this the coexistence of a high degree of autonomous, self-determination within the regional, area, and local units is sacrosanct. These deeply institutionalised 'ways of doing', were perceived by SJAF and SJAL as strengthening and enhancing the organisation's effectiveness. However, they were also understood as being competing forces that brought with them a degree of organisational tension. Throughout the SJAF federation, therefore, these norms need to be managed in ways that allow the charity to move easily and flexibly between operating as a unified national body when circumstances require and as autonomous and independently functioning regional, area, and local units when these needs are primary.

#### Shifting the Enterprise Logic

At the time of our research, the SJAF was engaging in internal redesign of its business operations, with the aim of enhancing resource utilisation and performance. Underpinning this was an online information management and communication system that was being implemented with the aim of:

- delivering enhanced information and data management [so as to];
- improve volunteer utilisation and deployment at national, regional, and local levels;
- [and] enable the organisation to operate effectively at national level without compromising local autonomies.

The development and roll-out of an integrated, online Duty Information Planning system [DIP], of which an SMS Text Messaging capability was a key component, was bringing significant new 'nimbleness' in volunteer deployment capability to the participating area units, including SJAL. *'When the London bombings happened, the St John Ambulance Foundation had more than 120 staff and volunteers at the scene within hours'* [Interviewee, 21 April 2011].

Developed in-house, the DIP software system allows the charity to optimise its ability to perform effectively at national and local levels without compromising either its capability to operate as a highly effective national movement or its local autonomy. The DIP integrates centrally supported human resource management functions, together with information about event planning and emergency incident rapid response activities, fed into the system at both national and local levels. *'The level of online capability that is available through the DIP system is a significant development over the "pen and paper" system that preceded it. It is allowing the St John Ambulance Foundation nationally and SJAL locally to provide significantly enhanced levels of responsiveness in respect of both routine day-to-day services delivery and emergency deployment, including "immediately life-threatening" calls'* [Interviewee, 21 April 2011].

The DIP is able to define the number of volunteers required for a particular event, to group volunteers according to their response, and to place excess affirmative responses in a 'reserve' group. Using DIP in combination with the SMS text messaging system and other communications media, in the event of an emergency, SJAL can see immediately which volunteers are available, their profile, and availability for deployment. When emergency situations arise locally, the system automatically 'flashes' an alert to the relevant operations centre, with volunteer availability also being visible to neighbouring regions in some instances. SMS Text alerts cascade out automatically to volunteers, with those located in the area closest to the event/incident contacted first. Messages are automatically forwarded to the next nearest unit if insufficient volunteers are available in the first area, and so on. With an average of 3000 messages delivered per month in SJAL's area, the DIP and SMS texting system bring crucial new capability in responding to emergency situations.

In sum, the SJAF and SJAL are seeking to use ICT/IS to enhance operational flexibility and effectiveness. However, rather than transforming the pre-existing enterprise logic, they are working with the grain of deeply embedded and valued 'ways of doing', thereby enabling new unifying norms and routines to coexist and flourish alongside the established and competing norms of autonomy and independence at local level.

## Royal National Institute for the Deaf

### Organisational Dimension

Celebrating its centenary year in 2011, the *Royal National Institute for the Deaf* (RNID) is a well-established charity operating throughout the UK; it provides a range of services related to hearing impairment. These services include research, advocacy, and the representation of the interests of people with hearing issues in the public policy sphere.

At the time of the research, the charity's workforce numbered in the region of 1000 paid employees and 900 volunteers, with plans to grow its volunteer workforce to circa 5000 within two years. It was also growing capability in the form of a team of salaried professional staff of some four years standing. The team was bringing strategic and operational expertise in a number of key areas ranging from Web-management and development, to digital communications and marketing, social media, and digital information systems. Responsible for the day-to-day management of the charity's hardware and software infra-structures, the charity's in-house team also had responsibility for the planning and development of longer-term ICT/IS capabilities and innovations. Expertise required for the short-term delivery of specific ICT/IS projects which was not held in-house was outsourced to specialist ICT/IS providers.

Responsibility for the generation of Web-content was devolved to staff at the frontline of service delivery and member/support engagement, as they were regarded as best placed to deliver topical, relevant, and informed material. So as to support this initiative, staff designated 'digital champions' were appointed to regional offices and relevant departments throughout the organisation.

### Environmental Dimension

As with the SJAF/SJAL, the RNID was seeking to manage a number of environmental imperatives and opportunities at the time of our research. First, it too was under pressure to continue to deliver and improve upon an already highly performing set of services during a period of intensifying competition across the sector. Second, and relatedly, it recognised that it needed to put in place arrangements that would make it more attractive and responsive to both existing and potential service users and supporters, with the increasing number of citizens using the Internet and related technologies a key group in this respect. Third, and intersecting these first two points, the charity recognised



the vulnerability of brand and reputation associated with the speed, scale, and public visibility of communication in the 'networked society'. Taken together, these concerns mean that brand and reputation can be quickly and deeply tarnished through exposure to criticism, whether or not the criticism is justified. Fourth were the opportunities afforded to the RNID to use the Internet and associated technologies in ways that would enhance the charity's relationships and performance, as well as strengthen trust in its brand and reputation? We elaborate further on this point in the section below, *Shifting the Enterprise Logic*.

### Institutional Dimension

Despite being of an age and size that tends to have an inhibiting effect on deep organisational change, the RNID was engaging with ICT/IS affordances to bring about service innovations and performance enhancements. Two associated sets of factors were perceived by our interviewees as critically important here. First, the charity's governing board was comprised of trustees who were very much at ease with ICTs in their daily lives and work. *'Lots of the trustees are using social media. Some of them, journalists, use Twitter, and Facebook, and have blogs. So, the Board understands that if you want to get your story out you need to be on these media'* [Interviewee, 2011]. Furthermore, as well as appreciating the opportunities afforded by new media technologies, the trustees also understood their more problematic aspects, including the implications for a charity's brand if criticisms went 'viral'. Second, the charity had recently appointed a new chief executive. With a background in politics and coming from a charity that had faced very significant online criticisms, the chief executive was also experienced in and comfortable with the challenges that could arise in the online environment. Importantly, both the trustees and the chief executive were aware that *'In the social media environment organisations cannot fully control the message'* [Interviewee, 2011]. Thus, it was the shared willingness and ability to accommodate this 'risk' on the part of the Board and the chief executive, in order also to reap the benefits of the online environment and the new media, that was crucially important in enabling ICT/IS-enabled change to be delivered in the RNID. Reinforcing this shared perspective and with a view to embedding new 'ways of doing' within the day-to-day norms and routines of the charity was the two-fold strategy of developing the dedicated ICT/IS unit with its own executive director on the one hand, and of engaging the charity's wider staff community on the other supported by the 'digital champions'.

### Shifting the Enterprise Logic

The RNID was bringing through ICT/IS-enabled innovations in three key areas of business at the time of our research, namely:

- enhancing the user-experience of its Web-based services
- relationship-building using social media
- garnering digital information and data to improve performance

In 2011, the charity launched a new website that will begin to deliver an enhanced user-experience in the form of 'personalised' content and functionality. *'The intention is to make our Web-based services more accessible and relevant for regular users as well as more occasional and unique visitors'* [Interviewee, 2011]. Using a Content Management System, the website will 'recognise' that someone has an interest in tinnitus, for example. As the person moves through the website, information about tinnitus will be automatically highlighted and drawn to their attention. The website will also 'recognise' and 'greet' registered repeat visitors. In the longer-term it is intended that Web-content will be increasingly generated by the charity's service users, members, and other supporters, further enhancing the user-experience.

The charity was also beginning to use social networking media as a means of raising the profile of the charity and its brand amongst the general public target and as a way of connecting with people who may be unaware of the organisation and its relevance to them. It was exploring, too, how the viral qualities that extend the reach of its critics can allow the charity to respond to those critics. Here, the charity's new capacity to be at ease with this environment meant that it was able to engage its critics confidently in constructive dialogue within the online public sphere. *'It was also learning and developing confidence that its communities of service users, members, and supporters were intervening positively on its behalf'* [Interviewee, 2011] as they, too, responded to its critics in open and discursive ways within online social spaces.

The RNID was also exploiting the opportunities presented by online technologies for sophisticated data capture and performance evaluation, *'with a view to enhancing the delivery of its frontline services and strategic positioning'* [Interviewee, 21 April 2011]. As the charity captures, mines, and analyses data with new levels of intensity, aggregation, and drill-down, bringing transparency to 'site traffic patterns', to 'visitor usage patterns', and to shop transaction patterns and performance, for example, it is now able to differentiate its service users and to segment its visitor profiles in ways that were previously impossible and that will bring better understanding of these communities. A longer-term aim is to generate informative dialogue within the RNID's online communities from which the charity

can achieve a better understanding of how people think about hearing and deafness and the impact of hearing loss on their own and the lives of relatives and friends. This information will support further performance improvements, including assisting the charity in its representative advocacy of hearing impaired communities in the public-policy sphere. It was recognised that *'Generating high quality dialogue and capturing and interrogating qualitative data of the kind that takes place in online discussion forums will be extremely challenging though'* [Interviewee, 8 April 2011].

In sum, the *RNID* is using the online environment and new media technologies in ways that can be seen as complementing and enhancing the existing enterprise logic, strengthening its relationships with existing and potential service users, members, and supporters and delivering services that are informed by better understanding of their needs.

## British Heart Foundation

### Organisational Dimension

Founded in 1961 by medical professionals concerned about the rapid growth in cardiovascular disease in the UK, the *British Heart Foundation* (BHF) provides services that range from those aimed at preventing heart disease, to supporting those with the disease, to research, public campaigning, and policy advocacy. One of the largest charities in the UK, as it has sought to continue to optimise performance in an increasingly competitive environment, the BHF has been conscious of the need to operate in a way that is well-managed and 'business-like'.

Led by retail professionals with top management experience in some of the UK's major retailers and our focus here, the BHF's Retail division is crucially important to the charity's income generation capabilities. In 2009/10, redesign of its retail operations significantly improved the turnover and profitability of Retail, with a 23 percent [£116m] increase in turnover shown in the accounts that year, together with a 40 percent increase in profits. That same year, it generated more than 20 percent [£22 million] of the £96.9 million of net incoming resources raised by the BHF. A discrete and key division within the BHF, Retail operates more than 678 high street shops, and, with its ninety-two specialist furniture and electrical outlets, it is the largest retailer of these types of second-hand goods in the UK.

BHF's website recorded more than 3.5 million hits in 2009/10, while its social media communities had in excess of 20,000 supporters, and its videos on YouTube recorded in the region of 175,000 viewings. Becoming increasingly significant for the charity, as well as serving to raise 'brand awareness' and to draw existing and new supporters into income-generating activities and volunteering, the charity's online resources are also key sources of information and data capture, allowing it to monitor 'footfall', browsing behaviour, return visits, and so forth. With the aim of growing and further developing its online capabilities, the charity had recently brought its traditional and digital communications teams together within a new multimedia department that has responsibility for developing and enhancing digital engagement and communications throughout the organisation. *'Retail is the new department's biggest customer'* [Interviewee, 21 April 2011].

### Environmental Dimension

BHF's Retail Division was seeking to manage a number of opportunities and imperatives. First, and like the other charities that we examined, it too was under pressure to deliver and improve upon an already high performance, this time across the charity's retail outlets. Second, and relatedly, it needed to reach and accommodate the growing number of citizens who prefer the convenience of the online environment for various activities, including donating and shopping. Third, as with high street retail more generally, BHF Retail needed to make more effective use of the opportunities afforded by the Internet and other relevant technologies, both to extend its brand reach and to enhance the effectiveness of its management of the retail process.

### Institutional Dimension

Two deeply embedded norms within BHF are its voluntarist underpinning and its engagement with local communities. The 'high street' presence of its charity shop outlets is crucially important in supporting and sustaining these norms and associated ways of doing, as raising its profile in this way assists the charity in attracting volunteers and other crucial support, including donations to and purchases from its retail outlets. *'BHF's Retail division is supported by approximately 22,000 volunteers, some of whom have been with the charity's Retail division for more than 20 years'* [Interviewee, 2011]. Perceived by BHF and Retail as strengthening and enhancing the organisation's effectiveness in significant respects, the charity was nonetheless keenly aware of the need to 'modernise' the retail function, bringing through new ways of doing in two key respects. First, therefore, BHF Retail began to put in place arrangements that would enable new informational routines to be implemented throughout the division. The twin aim here was to support and strengthen the capacity for centralised strategic decision-making within the divisional head office while also delivering improved capacity for day-to-day operational decisions and performance within the locally-based and relatively independent shop outlets. Second, aware that online shopping was capturing a growing

share of commercial retail business and keen to optimise the opportunities afforded here, BHF Retail was also beginning to operate through its own and other online shopping outlets. Significantly, in doing this the aim was not to move its shopping from the 'high street' to the Web. Instead, it was to expand the repertoire of opportunities for charity shoppers and to raise the charity's visibility in coexistence with the core and valued strengths existing in and through its high street shops.

### Shifting the Enterprise Logic

At the time of our research, Retail was bringing out a number of innovations that were beginning to change and augment existing arrangements.

Within the high street shops, the transition from a manual stock control and till system to electronic point of sale (EPOS) marked a first key step forward, as did the delivery of a Web-based system through which people wishing to donate electrical goods or furniture could easily book the collection of these items without having to visit or telephone the outlet. Subsequently upgraded and fully integrated with the charity's wider suite of information management systems, *'The EPOS system was allowing BHF's charity shops to capture stock and customer-related information and data, such as whether a payment was by cash or card, what types of stock were performing well in which shops; what stock was underperforming; and shopping trends'* [Interviewee, 2011]. Information and data captured in this way was enabling improvements to be delivered in areas that included stock management, sales, and training. Furthermore, with sales data that was previously uploaded to the head office overnight now received in real-time, Retail was quicker to identify patterns in demand and supply and to move stock around the shops so as to optimise sales value. It was also able to identify and respond expeditiously to issues such as an unusually high level of items being returned to a particular shop and *'which might indicate a training need in respect of new volunteer shop staff'* [Interviewee, 2011].

Retail's engagement with the online environment has added to its capabilities in several ways. Visitors to the charity's website are now able to enter and purchase from Retail's online shop. In 2009/10, Retail sold 7 million items from this outlet. In addition, fully integrated with the charity's wider Web-based information management systems, this is a further rich source of information and data for Retail that also informs its strategic and operational decision-making. The types of data that were beginning to be captured from the website included footfall, browsing behaviour, the number of potential shoppers who did/did not complete purchases, and the routes by which shoppers found and entered the online shop. Monthly, annual, and seasonal trends were also being captured, and Retail was able to monitor the impact on sales of major awareness raising campaigns. In addition to the BHF online shop, Retail also 'opened' a store on e-Bay, specifically for the sale of 'high value' items donated through its high street shops, but more likely to optimise their value if sold together with other 'high value' items in an online store reserved for precisely these types of goods and aimed specifically at customers willing to make high-value purchases of this sort.

Social networking communities such as Facebook and Twitter were also becoming *'a key source of information for Retail, providing insights into current and emerging trends in fashion, attitudes, and tastes'* [Interviewee, 2011]. They were seen, too, as presenting valuable opportunities for Retail to establish the online and high street outlets as shopping and giving destinations. They were perceived as well to be highly valuable channels for customer-relationship and brand management.

In sum, BHF Retail is seeking to operate more effectively, but to do this in ways that reflect and complement an already existing and valued enterprise logic that has voluntarism and its high street shops at its core. It is using EPOS, the online environment and new media technologies in ways that enable to raise BHF's brand, to optimise income generation, and to capture and interrogate hitherto untapped information and data.

## Family Holiday Association

### Organisational Dimension

The core mission of the *Family Holiday Association* is to improve the quality of life for families with children who are experiencing disadvantage due to poverty by assisting with access to holidays that these families would otherwise find unaffordable. A second important aspect of the charity's mission is *'to influence the public policy-making process by placing evidence of the benefits of family holiday provision on to the statutory agenda through a programme of research'* [Interviewee, 2011].

Established in 1975 by founders who had themselves benefited from the charitable provision of a family holiday, the *Family Holiday Association* had grown from serving twelve families *per annum* to enabling two thousand families to experience a holiday in 2010. Whilst its service had expanded in scale the charity itself remained relatively small, being run by a team of around ten full-time equivalent staff and with an annual income in the region of £1 million.

The *Family Holiday Association* does not act as a holiday provider in the direct sense. Its part in the process is to provide the financial support to enable the holidays to take place, subject to a satisfactory evaluation of the circumstances of the families referred to it. The referral process established by the *Family Holiday Association* involves 'welfare agents', in the form of doctors, teachers, social workers, and other professionals who have close knowledge of a family, making a *prima facie* identification of the family's need for a holiday, making the referral, and supporting the family through the assessment process. Subject to satisfactory evaluation of the family's application the *Family Holiday Association* provides what it deems an appropriate level and form of financial support for a holiday. The welfare agent books the holiday, handles the grant or voucher provided by the *Family Holiday Association*, accompanies and provides support to the family throughout the holiday, and, thereafter, provides a detailed report to the charity on the extent to which, and how, the family have benefited from the holiday experience.

### Environmental Dimension

The *Family Holiday Association* was seeking to manage a number of intersecting environmental imperatives and opportunities. First, it was experiencing sustained and significantly increasing demand for its family holiday provision, with circa 40 percent of growth taking place within the two-year period from 2009/10. Second, it was delivering growth of this magnitude, together with other performance enhancements and activities, during a period of intense and deepening competition for funds. Third, it had to optimise its use of ICTs, from databases to new media, if it was to raise its profile with a view to growing its fundraising income, and thereby enhance its capability to deliver its mission.

### Institutional Dimension

The *Family Holiday Association* embedded collaboratist and networked norms and ways of doing from the outset, its referral agents being one highly visible and significant manifestation of these arrangements and its partnership with TUI Travel plc<sup>1</sup> (a leading international leisure travel company). Its partnership with TUI Travel plc brings substantial financial support together with advantageous holiday access and holiday rates, while its referral agents 'are essentially co-workers' [Interviewee, 2011] without whom it would be extremely difficult, perhaps impossible, for the charity to function. Through collaborative arrangements the *Family Holiday Association* has been able to remain a small organisation, but one that is substantially resourced in ways that are directly performance-enhancing.

From its inception, the *Family Holiday Association* has understood the value of information and data, so much so that their capture and interrogation are also deeply embedded organisational routines. Indeed, the charity has become a hugely data intensive organisation, enabled as an essential part of its mission to provide a strong evidence base for its holiday work and its public policy-shaping activities.

In seeking to optimise its use of ICTs, the *Family Holiday Association* was setting out to do this in ways that complemented and enhanced these collaboratist and informing norms and arrangements.

### Shifting the Enterprise Logic

At the time of our research, the charity was bringing through a number of ICT-enabled changes that, reflecting and significantly augmenting its existing norms and practices, were enhancing its effectiveness in delivering its mission. Together with support from the top of the organisation, the appointment of a senior member of staff who brought direct experience of the ways in which ICTs could benefit the charity was crucial in bringing the *Family Holiday Association* into the online environment. The charity also benefited from support from a social entrepreneur who brought business expertise to their online engagement.

Three points help to summarise the challenges to the enterprise logic that this case raises. First, without the implementation of an online holiday application system and a grant administration database, the charity could not deliver holidays on its current scale or manage the significant number of applications that it receives. Of particular importance for the team of three full-time staff managing this service is 'the ability to generate bulk mailings from the database regarding application decisions and awards, voucher and cheque payments, and to manage complex group bookings sometimes involving dozens of families holidaying together' [Interviewee, 2011]. With the online holiday application and grant administration system opened to all referral agents for the first time in 2011, the charity anticipated that the 35 percent to 40 percent of referral agents already using the online system would increase sharply.

Second, the online environment is expanding the charity's fundraising scope, as well as raising its public profile more generally. The *Family Holiday Association* has developed a portfolio of such income generation relationships,

<sup>1</sup> TUI is one of the leading international leisure travel companies.

some of which we bring forward here. The Internet and related technologies are opening up opportunities for collaborations with commercial businesses which are enabling the *Family Holiday Association* to grow its largely UK-located donor base. They are also enabling the charity to form and develop relationships directly with potential supporters. Its collaborative arrangements with commercial businesses include being able to make available to visitors to the charity's website the fundraising 'app', 'Give as you Live'. Visitors to the website can download and use the app when purchasing from stores that include some 1200 of the UK's high street giants such as Tesco and John Lewis. On purchasing from these retailers an item that has a 'Give as you Live' tag, a percentage of the profit that Tesco or John Lewis make from that purchase is electronically and automatically transferred into the *Family Holiday Association's* bank account. Other online partnerships of which the charity is part include enabling supporters to donate through the 'Simonseeks.com' Facebook page. When the charity's supporters hit the 'Like' button, *Simonseeks.com* pledges a donation to the charity on reaching a specified number of 'likes'. In a similar way, the charity's supporters have also been invited to 'tweet' a review of a hotel, with 101 Holidays pledging a donation to the *Family Holiday Association* for every review posted. The charity also hosts the 'World's Biggest Pub Quiz' fundraising event on its own website. The data that this is generating is to be used by the *Family Holiday Association* to develop longer-term giving support for the charity.

Third, as we have said elsewhere, since its inception the *Family Holiday Association* has gathered data regarding its holiday provision. Now, through its electronic database the charity is increasingly able to capture information and data at the level of the individual family as well as to generate trend data based on aggregated data analysis. *'The information captured through the database enables correlations to be drawn in relation to "family type" [e.g., size of family, marital status, geographical location], issues affecting the family, information about the holidays taken, and the impact that the holiday has had on the family'* [Interviewee, 2011]. In recent years, the charity has sought to broaden the use of its data with a view to influencing aspects of public policy in addition to narrower gauge evaluation of its own work. Its growing ability to capture and manage information and data, and to do this in digital form, has enabled significant new research partnerships with the university sector to be developed and the yielding of stronger evidence than was previously available regarding the impact of holiday breaks.

In sum, founded in the pre-Internet era, the *Family Holiday Association* has moved on strongly in the ways it seeks to deliver its mission. In doing so, and as it has engaged with ICTs ranging from simple databases to Internet-related and new media technologies, it has continued to reflect and sustain its most deeply embedded norms and practices.

## YouthNet

### Organisational Dimension

*YouthNet* was born from the vision of its founder and chairman, Martyn Lewis, CBE, a journalist of considerable standing who had presented every mainstream national news programme on both BBC and ITV. His media experience meant that he had a strong sense of the opportunities afforded by developing technologies, including the Internet. Having published a book aimed at providing young people with information relevant to them, Lewis was quick to realise that, for information to be of worth, it had to be published online. As well as understanding that books went out of date too quickly, he also understood that they were in any case not the best way to communicate with young people. Founded in 1995, *YouthNet* was initially a 'self-contained' organisation providing a computerised database of services of relevance to young people. It is indicative of the 'novelty' of Lewis's vision and the distinctiveness of *YouthNet's* form and service by comparison with the charitable mainstream that *'Its first application for charitable status was refused by the Charity Commission for England and Wales on the basis that the Commissioners of the day could not see the need for an online charity'* [Interviewee, 2011].

### Environmental Dimension

*YouthNet*, like the other charities that we examined, was responding to a number of external imperatives and opportunities. First, it was experiencing growing competition for funding and other resources. Second, and relatedly, at the same time that it was facing increasing competition for diminishing resources, it was also experiencing heightening demand for services. Third, a 'virtual' charity and, moreover, one serving young people for whom ICTs are taken-for-granted in their lives and work, *YouthNet* was particularly well-placed to innovate using developing technologies.

### Institutional Dimension

While *YouthNet* (less than twenty years old and a young organisation in institutional terms) has always been a 'virtual' organisation, delivering its services exclusively over the Net, it has undergone significant transformation in enterprise logic, shifting norms, behavioural routines, and repertoires of engagement. It has moved from being a 'self-contained' organisation providing an online information database to its service users to one that is now the charitable embodiment of the 'network society' [Castells, 2000]. Now, *'Partnership, like online engagement, is integral to YouthNet, and one of its aims'* [Interviewee, 2011]. It is delivering a range of information, advice, and

other support services to the young people who use its services through a collaborative network of approximately 600 partner organisations. *YouthNet* serve young people between the ages of sixteen and twenty-five located throughout the UK, and the reach, scope, and immediacy of the services provided through *YouthNet*'s diverse network of public, voluntary, and private sector partners 'are only possible using the online environment' [Interviewee, 2011].

### Shifting the Enterprise Logic

Today, through its considerable network of partner organisations *YouthNet* is able to ensure that young people have access to appropriate (confidential) practical and emotional support and information on a 24/7 basis. This is the first charity in the UK to deliver services fully online, so its experience in this environment means that the charity has considerable expertise in reaching and delivering services to young people who now spend much of their time connecting and communicating in the online world that has become their natural environment. This expertise also makes it an attractive partner for other organisations delivering services to young people.

*YouthNet's partner organisations have expertise in working with and supporting young people and substantial knowledge spanning the widest possible range of themes of relevance to young people, covering subjects that range from education, to work, and life issues.*

*YouthNet has the expertise and technical capability to manage the online environment so that its partners can deliver their services effectively and safely to young people who can be extremely vulnerable, and for whom privacy and security are crucial* [Interviewee, 20 April 2011].

Thus, as well as developing and maintaining *YouthNet*'s online infrastructure—composed of software programmers, systems specialists, project managers, and IT support staff—the charity's technical team also provides support to the charity's partner organisations. Further support is available in the form of *YouthNet*'s operations team, composed of journalists, online community experts, and Web and project management experts. A development and marketing team is responsible for fundraising and data provision. Trained in the London office, but working online, *YouthNet*'s volunteers moderate chat forums, create videos, and so forth.

Through *YouthNet*'s websites, TheSite and Lifetracks, young people are able to access specialist support services from its network of partner organisations located throughout the UK. In 2010, in the region of 200,000 young people were visiting TheSite monthly. TheSite hosts *YouthNet*'s AskTheSite service through which young people are able to ask questions on an anonymous basis and to receive confidential responses. On average 800 questions are asked and answered each month through this service, while requests for information, advice, or help are made to the TheSite every twenty seconds. Hosting articles, podcasts, and videos, as well as chat forums, TheSite has a 41,000-strong online community. In 2009/10, a marketing and communications campaign in combination with a search engine optimisation strategy led to a 26 percent growth in TheSite's average monthly visitors, recording an overall expansion from 485,000 to 610,000. Within the first two years of its existence, Lifetracks, which focuses on educational- and employment-related matters, was hosting in the order of 20,000 unique users each month. Among the features and services that Lifetracks supports are interactive 'to do' lists, 'next steps' lists, and 'achievements' logs that young people can use to plan and help them manage key life events, such as preparing for job interviews or their first day at work; and an 'interactive payslip' through which young people are able to learn to read and understand their own payslip information. This website also hosts a bespoke, confidential question and answer service. NeedAnAnswer provides young people with personal, one-to-one, tailored support on educational and employment matters from online advisors and mentors. Using Lifetracks, young people are able to search for employment opportunities by linking directly to the UK Government's JobCentrePlus service. Through these websites, behind which sits its vast network of organisational partners, *YouthNet* is able to provide a set of services to its user communities that are highly integrated and of a scale and scope that would be much more difficult, perhaps impossible, to achieve using more traditional arrangements.

Developed in partnership with the Volunteer Centre network, *YouthNet* also hosts Do-It.org. This website provides searchable volunteering opportunities with voluntary, private, and public sector organisations. By October 2010, generating more than 50,000 registrations every month, the website had registered almost 700,000 volunteers. By the end of December 2010, almost 2 million volunteering applications had been made through the website, with *YouthNet*'s delivery-partner organisations posting around 61,000 of the more than 1.5 million volunteering opportunities available in circa 28,000 organisations throughout the UK. Syndicated to partner organisations, Do-It.org can be integrated within their websites, with its content fully or partially tailored to the partner organisation's own website.

*YouthNet* adds considerable strategic value to the service that it provides to its organisational partners through extensive data capture and interrogation. A number of tools and methods are used to capture and analyse data such as postcode, demographic information, and the types of question asked by the young people using the charity's



services. The charity also captures data relating to its Web-traffic, usage, and navigation patterns, such as number of visitors, pages visited, duration of visit, IP addresses, browser configurations, and where visitors were prior to accessing the website. Prioritising data privacy and security, 'information and data captured through the YouthNet websites is directly retrieved and stored by YouthNet and cannot be directly captured or analysed by its partner organisations' [Interviewee, 2011]. Using anonymised, aggregated, data profiles, however, YouthNet provides performance feedback to the relevant partner organisations, enabling them to see where they are performing well as providing them with the opportunity to reflect on how performance improvements might be delivered.

At the time of the research YouthNet was planning an overhaul of the charity's ICT infrastructure and delivery channels to involve server virtualisation, new developments in volunteer recruitment and management software, new website developments, and services to young people delivered through social network media.

In sum, YouthNet was able to deliver transformational change in the organisational arrangements and ways of doing which lay at the core of its enterprise logic. In a relatively short time this charity moved from a self-contained organisation, delivering services independently of other organisations, to one that is now highly collaborative in its arrangements.

## See the Difference

### Organisational Dimension

Established in 2008, like YouthNet, See the Difference was also born of a vision of the opportunities afforded by ICTs, in this case new media technologies and the so-called Web 3.0 especially. And, like YouthNet, See the Difference's cofounders also brought to bear substantial mass media exposure and expertise. Together with a small professional staff team of circa 8.5 full-time equivalent posts, the charity was also supported by approximately seven hundred volunteers committing their relevant *pro bono* expertise. See the Difference is, therefore, an example of a relatively small charity, as conventionally understood, but one which, in similar style to both the Family Holiday Association and YouthNet, gathered strength through its collaborative working with a network of circa volunteers whose capabilities included business planning, retailing, marketing, and legal expertise, as well as digital media. Here, though, the aim was to connect and engage donor/fundraisers and charities in a new way.

### Environmental Dimension

Despite its innovative profile, See the Difference was not immune from the intense competition for resources experienced throughout the charitable sector in the UK. Moreover, as a charity whose own mission and *raison d'être* was to enhance the fundraising efforts of charities subscribing to its service, it was assuming an even more challenging role in this respect. It was also entering its 'business' niche at a time when a for-profit organisation was already establishing an online presence and platform through which donor/fundraisers and charities could meet. In addition, it was doing so at a time of especially fast-moving developments in social networking and mobile technologies, including 'giving' apps that were paving the way for other similar 'start-ups', as well as making it easier for frontline service-providing charities to utilise these technologies directly. Together, these were bringing both significant imperatives and evolving opportunities for See the Difference to position itself distinctively within the online donor/fundraising niche.

### Institutional Dimension

Three equally significant and intersecting sets of aims and values inspired the development of See the Difference and the behavioural routines and repertoires that were put in place. (We elaborate on these in the section following.) First, the intention was that 'Generating income from donative giving and fundraising should be a straightforward, highly efficient, and cost-effective process for charities' [Interviewee, 2011]. Second, it was important, that as well as being easy and rewarding processes in which to engage, the donative and fundraising processes were also 'fun and exciting for donors and fundraisers' [Interviewee, 2011]. Crucially, the aim was not to achieve single or ad hoc involvement on the part of donors/fundraisers, but to grow and establish a new generation of donors/fundraisers amongst young people for whom donative giving and fundraising would be 'socially important activities and ones that become habitual' [Interviewee, 2011]. Third, and also with a view to making giving rewarding and habitual, See the Difference aimed to develop accountable and informed relationships between recipient charities and those donating and fundraising on their behalf, thereby enhancing trust that efforts made on behalf of charities were justified.

### Shifting the Enterprise Logic

For charities raising funds using See the Difference, three aspects of its underpinning behavioural repertoires and routines represent a clear departure from more traditional arrangements:

- Traditionally charities competing for funds have done so independently and in isolation from each other. Using the *See the Difference* website, charities competing for funding are brought together in a shared space congregated by potential donors/fundraisers for whose support they are competing.
- *See the Difference* makes available to its subscribing charities access to shared expertise and fully automated digital systems for attracting supporters and processing funds.
- *See the Difference* makes available to donors/fundraisers a 'marketplace' of charities and projects from which to choose, and it enables them to donate or fundraise from within the online environment.
- Charities have access through *See the Difference* to digitally captured collectivised information and data not available through traditional giving relationships.

*See the Difference* provides what we conceptualise as a 'hub' in which charities competing for funding are brought together within a shared space, a space, moreover, in which potential donors and fundraisers have also come to seek out a charitable project that they wish to support. Here, *'Donors can have a relationship with one or more charities, as the website is bringing a range of charities into one space. But charities have to accept that this is a break from the traditional model of having "their own loyal donors" as donors can move around charities freely'* [Interviewee, April 2011].

Charities working with *See the Difference* are provided with an introductory briefing, available either online or at the charity's London office. Each subscribing charity is invited to produce a filmed representation of specific projects in which they are engaged. Once completed, these films are loaded onto *See the Difference's* website and are available for viewing by anyone visiting the site. Crucially, the subscribing charities are offered training in filmmaking techniques. Each is assigned a volunteer mentor with experience of film and television production, who then guides them through the filmmaking process.

Potential donors/fundraisers who visit the site are able to search for charitable projects to which they would like to donate or for which they would like to fundraise. They can search for projects by browsing the website or by using keyword searches such as 'environment', 'animals', 'disability'. The prospective donor/fundraiser is also able to search the site for 'most donated to', 'new projects', or they can search by 'geographic location', for example. Once they have identified a project or projects that are of interest, potential donors/fundraisers can watch the short film that has been made by the charity, which tells them about the project and how donated funds will be used. Each film is accompanied by a 'feedback promise', advising potential and actual donors and fundraisers how and when they will receive reports about the funded project. Donors and potential donors and fundraisers can also see when a project has reached its funding target, as well as how much funding is still required at any point in time.

Donors wishing to fundraise on behalf of projects can do so in various ways, including setting up their own fundraising page on the *See the Difference* website sending e-cards, or inviting friends to donate to projects in place of giving a traditional birthday or Christmas gift. A 'spread the word' button located on each page of the website enables donors easily to spread information about the charity that they are sponsoring. Once a donor/fundraiser has identified the charitable project they wish to support *See the Difference* provides a secure platform through which they are able to donate or to fundraise on behalf of their chosen project. Volunteer fundraisers, working individually or in teams, can set up their own fundraising page on *See the Difference's* website. Also using the 'spread the word' button located on *See the Difference's* Web pages, the volunteer fundraisers are able to spread information, virally, through social networking and social bookmarking sites about the charitable project that they are sponsoring so as to garner resources behind their fundraising campaign.

Donations are automatically processed online through Virgin Money Giving [[uk.virginmoneygiving.com](http://uk.virginmoneygiving.com)], reaching charities within a few days of collection and receipt. The donors and fundraisers are automatically informed of the project's achievements. Indeed, all aspects of the business process—from registering client charities and donors, to identifying projects in need of funding, to donating and fundraising, to processing donations, to reporting project outcomes to donors/fundraisers—take place in the online environment.

By bringing charities together with donors and fundraisers in this way, *See the Difference* is able to add further strategic value to the service it provides, generating information for its subscribing charities about the impact of their Web presence on the *See the Difference* site. The types of information that are regularly made available to them include aggregated and anonymised information such as age, education, and location of visitors, as well as their navigation route around the website, how long they stayed on the website, and the outcome of their visits. This type of benchmarking information is aimed at assisting the charities to develop more tailored and effective relationships with donors and potential donors. *'For many charities such data are hard to gather and their understanding and use of such data is often limited'* [Interviewee, 8 April 2011]. Moreover, as well as routinely sharing with its registered



charities data relating to their own specific projects, the ability to collectivise these data across the whole group of subscribing charities means that charities registered with *See the Difference* have access to comparative data that would be unavailable through more traditional modes of fundraising in which charities fundraise independently and in isolation from one another.

*See the Difference* further supports subscribing charities through its dissemination activities on leading social media websites, including Facebook and Twitter. In keeping with its view that younger donors are looking for new forms of connectivity and commitment with the charitable sector, *See the Difference* aims to be in the virtual spaces of these younger, 'Net-savvy' people through these social media activities.

#### Postscript

Shortly after our research was completed, *See the Difference* was renamed *The Giving Lab*. While retaining the core mission, repertoires, and routines of *See the Difference*, under the aegis of *The Giving Lab* the interrelationship between giving, fun, and the opportunities opened up by new media technologies is now highly prominent. It is also being taken forward in a new way that enlists the ideas and enthusiasm of highly skilled 'techies' who enjoy 'playing' with technology. Thus, a significant part of the charity's repertoire now is to attract people excited by opportunities to be experimental with new media, to volunteer their ideas and expertise through *The Giving Lab*, and thereby lead the way in continuing to find creative ways of making online giving fun for themselves and others.

In sum, *See the Difference* delivered a mode of fundraising that was significantly different to the enterprise logics traditionally operated within the UK charitable sector. Whilst differentiated in this way, the charity also stands out for the way in which it seeks to catalyse transformations to the logic of enterprise embedded in those charities with whom it works. Subsequently, as *The Giving Lab*, the charity's underpinning repertoires and routines continue to represent a clear departure from traditional arrangements.

## V. CONCLUSIONS

The research that we report in this article looked at whether charities are using ICTs to deliver change in core business activities. We have found that in each of the charities these technologies are affording shifts in their organisational arrangements and ways of doing. In the older pre-Internet charities, these changes tended to augment their relatively settled and pre-existing enterprise logic, while, in the younger 'Net generation' organisations, the shifts tended to be more in the form of a break with established organisational and institutional arrangements. We bring together the key points of organisational contrast and change in Table 1. Crucially, accompanying and underpinning the changes that we found are growing capabilities in digital information and data capture and interrogation. Indeed, it was this informational capability rather than the technologies *per se* that was of critical importance for the organisations that we examined. In each of the charities, information and data management was both intensifying and becoming more sophisticated.

Importantly, in understanding the interrelationship among ICT/IS, charities, and change, we found it helpful to engage with three sets of influences, namely, the organisational dimension, the environmental dimension, and the institutionalist dimension. In this way we avoided attributing change within these charities primarily or mainly to technological factors. Instead, we were able to take account of the settled institutional arrangements that filter approaches to the adoption of changing technologies and which speak to the challenges of delivering change in older organisations especially. We were able, too, to take account of imperatives and opportunities emerging within the organisational and environmental contexts of the charities that conveyed an impulsion for change. In the two Internet generation charities, *YouthNet* and *See the Difference*, two associated factors that differentiated them from the pre-Internet generation charities, were the leadership backgrounds of their founders and their focus on Generation Y service users. These were also young organisations, not bound by embedded and established 'ways of doing'.

Finally, at Section I of this article we set out three questions that together formed the intellectual springboard for the work we have reported here. We asked 'Are charities harnessing ICTs in ways that keep them relevant to contemporary society?' 'Are long-established charities engaging with the Internet and related technologies in ways that are challenging embedded organisational practices?' 'Are there charities in which ICTs are essential in the delivery of mission?' We have seen charities seeking to engage with ICTs in ways that are consistent with wider social norms of ICT use. We have seen established charities adopting new systems in ways that work with the grain of existing organisational practices. We have found that while in each of the charities ICTs have become essential to the delivery of charitable mission, in two charities (*see the Difference* and *Youthnet*) they are the *sine qua non* of their operations. Thus, our approach to case selection brings forward examples of new generation charities that have been built around computer networking and new media capabilities, alongside older generation charities that are engaging adaptively with ICTs. In so doing, it captures an important contrast between the 'pre-Internet' charities

working with the organisational and institutional grain as they deliver change and the 'Net generation' charities that are delivering change of more transformational order.

**Table 1: Organisational Profiles and Shifting Enterprise Logics**

Charities	Organisational dimension	Environmental dimension	Institutional dimension	Nature of ICT/IS-enabled shifts
<i>St John Ambulance Foundation/Lancashire</i>	Old; complex structure; 'pre-Internet generation'	Intensifying competition, expectations, and demands	Central-local imperatives	Augmenting traditional/existing enterprise logic
<i>Royal National Institute for the Deaf</i>	Old; complex structure; 'pre-Internet generation'	Intensifying competition, expectations, and demands. Key stakeholders using social media	Leadership comfortable with ICTs, risk, and innovation	Augmenting traditional/existing enterprise logic
<i>British Heart Foundation</i>	Old; complex structure; 'pre-Internet generation'	Intensifying competition, expectations, and demands	Central-local imperatives	Augmenting traditional/existing enterprise logic
<i>Family Holiday Association</i>	Young; simple structure; 'pre-Internet generation'	Intensifying competition, expectations, and demands	Networked and collaboratist	Augmenting traditional/existing enterprise logic
<i>YouthNet</i>	Young; simple structure; founder has media background; 'Internet generation'.	Intensifying competition, expectations, and demands. Targets Generation Y	Networked and collaboratist	Delivering new enterprise logic
<i>See the Difference</i>	Young; simple structure; founders have media backgrounds; 'Internet generation'.	Intensifying competition, expectations, and demands. Targets Generation Y.	Networked and collaboratist	Delivering new enterprise logic

## ACKNOWLEDGMENTS

The authors would like to thank the Nominet Trust for commissioning the research reported here. They would also like to thank the research participants for so generously giving their time and for access to their organisations. They would like to extend particular thanks, too, to the Associate Editor of CAIS not only for his very thorough and thoughtful reviews of this article in its draft stages, but also for the spirit in which his observations and comments were delivered.

## REFERENCES

*Editor's Note:* The following reference list contains hyperlinks to World Wide Web pages. Readers who have the ability to access the Web directly from their word processor or are reading the article on the Web, can gain direct access to these linked references. Readers are warned, however, that:

1. These links existed as of the date of publication but are not guaranteed to be working thereafter.
2. The contents of Web pages may change over time. Where version information is provided in the References, different versions may not contain the information or the conclusions referenced.
3. The author(s) of the Web pages, not AIS, is (are) responsible for the accuracy of their content.
4. The author(s) of this article, not AIS, is (are) responsible for the accuracy of the URL and version information.

Burt, E. and J.A. Taylor (1999) Information and Communication Technologies: Re-shaping the Voluntary Sector in the Informatuion Age?, *Report*, Glasgow, England: Glasgow Caledonian University.



- Burt, E. and J.A. Taylor (2000) "Information and Communication Technologies: Reshaping Voluntary Organisations?", *The Journal of Nonprofit Management and Leadership*, (11)2, pp. 131–143.
- Castells, M. (2000) *The Rise of the Network Society*, Oxford, England: Blackwell.
- Conole, G. and M. Dyke (2004) "Understanding and Using Technological Affordances: A Response to Boyle and Cook", *Alt-J Research in Learning Technology*, (12)2, pp. 301–308.
- Cuesta, C. (2012) "Building a Mission–Delivery Engine: Moving Your Website Beyond the Web" *Nonprofit Quarterly*, <http://www.nonprofitquarterly.org> (current Mar. 6, 2012)
- Deakin, N. (1996) *Meeting the Challenge of Change: Voluntary Action into the 21<sup>st</sup> Century*, London, England: NCVO.
- DiMaggio, P.J. and W.W. Powell (1983) "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields", *American Sociological Review*, (48)2, pp. 147–160.
- Dutton, W.H. and G. Blank (2011) *Next Generation Users: The Internet in Britain*, *Oxford Internet Survey Report*, Oxford, England: Oxford Internet Institute.
- Frumkin, P. and J. Galaskiewicz (2004) "Institutional Isomorphism and Public Sector Organizations", *Journal of Public Administration Research and Theory*, (14)3, pp. 283–307.
- Fuchs, C. (2008) *Internet and Society: Social Theory in the Information Age*, London, England: Routledge.
- Goecks, J., A. Volda, S. Volda and E.D. Mynatt (2008) "Charitable Technologies: Opportunities for Collaborative Computing in Nonprofit Fundraising", *Proceedings of the ACM Conference on Computer Supported Collaborative Work (CSCW)*, November 8–12, pp. 689–698.
- Gomm, R., M. Hammersley and P. Foster (2000) "Case Study and Generalization", in Gomm, R., M. Hammersley and P. Foster (eds.) *Case Study Method: Key Issues, Key Texts*, London, England: Sage.
- Hems, L. and A. Passey (1999) *The UK Voluntary Sector Almanac 1998/99*, London, England: NCVO.
- Jonson, K. and K.A. Jehn (2009) "Using Triangulation to Validate Themes in Qualitative Studies", *Qualitative Research in Organizations and Management: An International Journal*, (4)2, pp.123–150.
- KANA (2013) *Serving the Digital Customer in an Age of Austerity*, Sunnyvale, CA: KANA Solutions Inc.
- Kendall, J. (2000) "The Mainstreaming of the Third Sector into Public Policy in England in the Late 1990s: Whys and Wherefores", *Policy and Politics*, (28)4 pp. 541–562.
- Kroeker, K.L. (2010) "Engineering the Web's Third Decade", *Communications of the Association of Computing Machines*, (53)2, pp.16–18.
- Leonardi, P.M. (2011) "When Flexible Routines Meet Flexible Technologies: Affordance, Constraint, and the Imbrication of Human and Material Agencies", *MIS Quarterly*, (35)1, pp. 147–167.
- Lincoln, Y.S. and E.G. Guba (1985) *Naturalistic Inquiry*, London, England: Sage.
- Llewellyn, S. and D. Northcott (2007) "The 'Singular View' in Management Case Studies", *Qualitative Research in Organizations and Management: An International Journal*, (2)3, pp.194–207.
- National Council for Voluntary Organisations (NCVO) (2012) *Civil Society Almanac*, London, England: National Council for Voluntary Organisations.
- North, D.C. (1990) *Institutions, Institutional Change, and Economic Performance*, Cambridge, England: Cambridge University Press.
- Pollack, T.H. and A. Blackwood (2007) "The Nonprofit Sector in Brief: Facts and Figures from the Nonprofit Almanac", <http://www.urban.org/url.cfm?ID311373> (current Jan. 8, 2013).
- Putnam, R. (2000) *Bowling Alone*, London, England: Simon and Schuster.
- Salamon, L.M. and H.K. Anheier (1994) *The Emerging Sector: An Overview*, Baltimore, MD: Johns Hopkins University Press.
- Salomon, G. (ed) (1993) *Distributed Cognitions—Psychological and Educational Considerations*, Cambridge, England: Cambridge University Press.
- Schofield, J.W. (2000) "Increasing the Generalizability of Qualitative Research" in Gomm, R., M. Hammersley and P. Foster (eds.) *Case Study Method: Key Issues, Key Texts*, London, England: Sage.
- Scott, R.W. (2001) *Institutions and Organizations*, London, England: Sage.

Smerdon, M. (ed.) "The First Principle of Voluntary Action: Essays on the Independence of the Voluntary Sector from Government in Canada, England, Germany, Northern Ireland, Scotland, United States of America, and Wales", Working Paper 3, London, England: The Baring Foundation.

Wing, K.T., K.L. Roeger and T.H. Pollack (2010) *The Nonprofit Sector in Brief: Public Charities, Giving, and Volunteering 2010*, Washington, DC: The Urban Institution.

Zorn, T.G., A.J. Flanagan and M.D. Shoham (2011) "Institutional and Non-institutional Influences on Information and Communication Technology Adoption and Use Among Nonprofit Organizations", *Human Communication Research*, (37), pp.1–33.

Zuboff, S. and J. Maxmin (2004) *The Support Economy*, London, England: Penguin.

## ABOUT THE AUTHORS

**Eleanor Burt** is a Senior Lecturer with the School of Management, University of St Andrews. Her research, consultancy, and teaching engages with the 'Third Sector' in the UK and internationally, where her interests are centred on information management, ICTs, organisational change, and government-voluntary sector relationships. She has been lead investigator on a research project that delivered the first large-scale mapping of the uptake and application of information and communication technologies within the UK voluntary sector under the Economic and Social Research Council's Virtual Society Programme. She was an invited member of the ICT Foresight Panel chaired by the National Council for Voluntary Organisations. She has also been commissioned to undertake research for bodies that include the Baring Foundation and the Nominet Trust, and she has been invited to give expert advice to the UK Government's Cabinet Office. She is well-published in scholarly and professional journals in her field.

**John Taylor** is Professor of Governance and Information Management at Caledonian Business School, Glasgow. He has also been a Research Associate at the Oxford Internet Institute at the University of Oxford and is currently Honorary Professor at the University of Nottingham. He has published widely on themes relating to government in the information age, including relationships with the third sector. He was chair of the European Group on ICT in Public Administration (1998–2006) and chaired a similar group in Eastern and Central Europe (2005–2006). He has been an invited speaker on many occasions, nationally and internationally. He was a member of the National Council for Voluntary Organisations' (NCVO) ICT Foresight panel (2005–2007) and a member of CISCO's Connecting Government Think Tank (2006–2007). More recent work on 'identity management' led to an invitation to give evidence to the House of Lords' Constitution Committee in their preparations for an inquiry into the 'surveillance society'.



Copyright © 2013 by the Association for Information Systems. Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and full citation on the first page. Copyright for components of this work owned by others than the Association for Information Systems must be honored. Abstracting with credit is permitted. To copy otherwise, to republish, to post on servers, or to redistribute to lists requires prior specific permission and/or fee. Request permission to publish from: AIS Administrative Office, P.O. Box 2712 Atlanta, GA, 30301-2712, Attn: Reprints; or via e-mail from [ais@aisnet.org](mailto:ais@aisnet.org).



# Communications of the Association for Information Systems

ISSN: 1529-3181

## EDITOR-IN-CHIEF

Matti Rossi  
Aalto University

## CAIS PUBLICATIONS COMMITTEE

Kalle Lyytinen Vice President Publications Case Western Reserve University	Matti Rossi Editor, CAIS Aalto University	Shirley Gregor Editor, JAIS The Australian National University
Robert Zmud AIS Region 1 Representative University of Oklahoma	Phillip Ein-Dor AIS Region 2 Representative Tel-Aviv University	Bernard Tan AIS Region 3 Representative National University of Singapore

## CAIS ADVISORY BOARD

Gordon Davis University of Minnesota	Ken Kraemer University of California at Irvine	M. Lynne Markus Bentley University	Richard Mason Southern Methodist University
Jay Nunamaker University of Arizona	Henk Sol University of Groningen	Ralph Sprague University of Hawaii	Hugh J. Watson University of Georgia

## CAIS SENIOR EDITORS

Steve Alter University of San Francisco	Michel Avital Copenhagen Business School
--	---

## CAIS EDITORIAL BOARD

Monica Adya Marquette University	Dinesh Batra Florida International University	Tina Blegind Jensen Copenhagen Business School	Indranil Bose Indian Institute of Management Calcutta
Tilo Böhmann University of Hamburg	Thomas Case Georgia Southern University	Harvey Enns University of Dayton	Andrew Gemino Simon Fraser University
Matt Germonprez University of Nebraska at Omaha	Mary Granger George Washington University	Åke Gronlund University of Umea	Douglas Havelka Miami University
Jonny Holmström Umeå University	K.D. Joshi Washington State University	Michel Kalika University of Paris Dauphine	Karlheinz Kautz Copenhagen Business School
Julie Kendall Rutgers University	Nelson King American University of Beirut	Hope Koch Baylor University	Nancy Lankton Marshall University
Claudia Loebbecke University of Cologne	Paul Benjamin Lowry City University of Hong Kong	Don McCubbrey University of Denver	Fred Niederman St. Louis University
Shan Ling Pan National University of Singapore	Katia Passerini New Jersey Institute of Technology	Jan Recker Queensland University of Technology	Jackie Rees Purdue University
Jeremy Rose Aarhus University	Saonee Sarker Washington State University	Raj Sharman State University of New York at Buffalo	Mikko Siponen University of Oulu
Thompson Teo National University of Singapore	Heikki Topi Bentley University	Frank Ulbrich Newcastle Business School	Chelley Vician University of St. Thomas
Padmal Vitharana Syracuse University	Rolf Wigand University of Arkansas, Little Rock	Fons Wijnhoven University of Twente	Vance Wilson Worcester Polytechnic Institute
Yajiong Xue East Carolina University			

## DEPARTMENTS

Information Systems and Healthcare Editor: Vance Wilson	Information Technology and Systems Editors: Dinesh Batra and Andrew Gemino	Papers in French Editor: Michel Kalika
--	---	---

## ADMINISTRATIVE PERSONNEL

James P. Tinsley AIS Executive Director	Meri Kuikka CAIS Managing Editor Aalto University	Sheri Hronek CAIS Publications Editor Hronek Associates, Inc.	Copyediting by S4Carlisle Publishing Services
--	---	---	--

