

**Technology Funding – Literature Review**  
**SUMMARY**  
**By Jillaine Smith**  
**(under contract to Summit Collaborative)**  
**10 July 2002**

As we explored foundation opinions and grantmaking practices, we examined recent studies about nonprofit technology use and support. We want to understand as much about the lay of the land as we can, and perhaps more importantly, we seek to name what we don't yet know. The studies we reviewed fell into the four categories. In some cases, we found studies that touch on more than one of these areas. In these cases, we weave their findings throughout this review.

1. **Technology Access & Use** – predominantly quantitative data about percent of organizations with Internet access, with technology budgets and plans, etc., in various components of the nonprofit sector.

For the most part, we reviewed studies that had been conducted since 2000. The data from earlier studies is now sufficiently dated to no longer reflect the current environment; in addition, a recent report from NCRP includes an overview of many of these earlier analyses.

Overall, the older studies reveal that while *access* to both computer technologies generally and the Internet more specifically is approaching universality, most nonprofits continue not to plan or budget for technology, nor are they able to hire, train and retain qualified IT staff. These findings continue to be confirmed by studies conducted in 2001 and 2002.

- Technology planning remains very low in organizations—whether large or small (although higher budget organizations are more likely to plan for technology).<sup>1 2</sup>
- Those organizations that include technology skills in job descriptions and performance evaluations are more likely to offer technology training opportunities to staff. (1)
- While access to and use of basic technology is on the rise, email use is nearing universality, and the number of organizations publishing of web sites rises each year, organizations are not exploiting more advanced features of the Internet (interactivity, personalization, customized content).(2)<sup>3</sup>
- While nationally, nonprofits budgeting for technology is on the rise (GIK 2001), within particular sectors, including human services, most are still not doing so. And finding and retaining qualified staff remains a challenge.<sup>4</sup>

---

<sup>1</sup> “Technology Use by Nonprofit Organizations in Southwestern Pennsylvania,” by Jeff Forster, Bayer Center for Nonprofit Management, September 2001.

<sup>2</sup> “From Digital Disconnect to Digital Empowerment: building a more equitable society through leadership, investment and collaboration,” Leadership Conference on Civil Rights, Leadership Conference Education Fund, Civilrights.org, Spring 2001.

<sup>3</sup> *Virtual Promise*, by Joe Saxton and Stephen Game, Future Foundation Consulting, 2001.

<sup>4</sup> “Wired, Willing and Ready: Nonprofit Human Service Organizations' Adoption of Information Technology,” by Princeton Research Associates for Independent Sector, Cisco Systems, December 2001.

- Budgeting for training remains far behind, and there has been no change over the last few years.(GIK 2001) And very few organizations are benefiting from or even exploring the use of online training (3).
- 2. Nonprofit Technology Practices** – limited survey data and some anecdotal information about different ways nonprofits are applying technology to advance mission.

A number of studies have tried to define typical “nonprofit” applications of information technology. They come down to these (in no particular order):

- conducting organizing and advocacy campaigns
- serving as a community information clearinghouse
- compiling and mapping data that impacts a community (using GIS, for example)
- networking with peers, sharing lessons learned through online communities
- creating innovations in service delivery
- generating income
- improving operational efficiency

However, few efforts have been made to study the extent to which nonprofits engage in these practices or how well they do so. Perhaps the common drumbeat emanating from reports published in 2001-2002 is less about the *applications* and more about the impact that technology applications are having on the very fabric of nonprofit organizations and even the sector as a whole:

- Nonprofits and foundations can still benefit from increased understanding of how online resources can enhance nonprofit impact.<sup>5</sup>
- Nonprofits must think differently about information flow, interactions with constituents, and new kinds of networks. This shift in thinking also requires new kinds of organizational management, including the creation of learning organizations, the flattening of hierarchies, and the redesign of business processes.<sup>6</sup>
- “The real payoff will come for those who capitalize on how information technologies affect whole organizations (and their relationships with the organizations around them), not just functions within organizations.”<sup>7</sup>

In addition, little has been written about how nonprofits are *evaluating* their technology initiatives. Most organizations are relying on web page “hits” as a measurement of their success, even while recognizing the limitations of such evaluation. Funders need to develop tools (or invest in their development) for measuring the social return on investment in technology initiatives. Even the world of Venture Philanthropy – or “High-Engagement Philanthropy” as it is now being called – is struggling with evaluation metrics. A recent

---

<sup>5</sup> “Beyond Access: A Foundation Guide to Ending the Organizational Divide,” by Bethany Robertson, National Committee on Responsive Philanthropy, December 2001.

<sup>6</sup> “After the Bubble: Investing in Internet-based Social Enterprise in Challenging Times,” by Jason Scott for the Flatiron Foundation, December 2001.

<sup>7</sup> “More than Bit Players: How Information Technology Will Change the Ways Nonprofits and Foundations Work and Thrive in the Information Age,” by Andrew Blau for the Surdna Foundation, May 2001.

survey of funders in this category pointed out that there is little agreement about common metrics for success. 40% had not yet developed or did not share how they would measure success for their grantees. Of the remainder, almost all develop metrics specific to the circumstances of the grantee. Only three organizations had developed any specific social return on investment (SROI) or balanced scorecard tools to measure each investment. Two went as far as to say that if a strong business plan was their measure of success.<sup>8</sup>

**3. Technology Capacity Building** – what’s being learned about different approaches to make organizational use of technology more effective.

Very little research has been conducted on nonprofit technology capacity *nationally*. Instead, most studies focus on specific regions in the U.S., or particular types of nonprofit activity (human services, advocacy). And even in these studies, the research has been largely focused on *access*, and much less on technology initiatives, technology impact or other areas of technological development.

Certain key issues surface again and again despite the technology capacity building method being employed: Technology must be understood as a management issue; nonprofits and foundations need to better understand, evaluate and carefully plan for the role of technology in advancing mission; there is no one-size-fits all model that will serve all the needs of communities—hybrid approaches based on community assessments work better than any one given approach.<sup>9</sup>

More recently, much attention has been paid to the links between the societal digital divide and nonprofit technology capacity—that, in fact, building the capacity of community-based nonprofit organizations is essential to bridging the digital divide. “Once these organizations have the technical capacity, they can produce community based content, participate in the new economy and develop new policies to support other organizations’ efforts to use IT as part of a comprehensive equity-building strategy.”<sup>10</sup>

**4. Technology Funding Trends** – less survey research and more discussion of current economic trends and business practices that impact the nonprofit and charitable sector.

The economic downturn of 2000 and 2001 resulted in big hits against foundations whose endowments were closely tied to the market. These hits translated to major cuts in grants. These and other foundations are, as a result, trying to be more selective and strategic in their grantmaking. “The... organizations we fund must have the capacity to succeed...” nonprofits “have to show some urgency ... about outcomes and efficiencies.”<sup>11</sup>

What we know so far about technology-related grantmaking runs parallel to the experience of nonprofits in their use of technology and in the capacity building efforts to improve

---

<sup>8</sup> *Venture Philanthropy 2002: Advancing Nonprofit Performance Through High-Engagement Grantmaking*, prepared by Community Wealth Ventures, Inc. for Venture Philanthropy Partners, 2002, p. 36

<sup>9</sup> Jillaine Smith, unpublished research for the Benton Foundation, 2000.

<sup>10</sup> “Bridging the Organizational Divide: Toward a Comprehensive Approach to the Digital Divide,” by Josh Kirschenbaum and Radhika Kunamneni, PolicyLink, 2001.

<sup>11</sup> *Venture Philanthropy 2002*, p. 7.

nonprofit technology use. Namely, the bulk of technology-grantmaking (that has been identified as such) supports access more than it supports the human challenges that must be addressed in order for investments in technology to pay off. “Technology” grants are too heavily biased towards equipment and do not support training, technical assistance and maintenance. “Much of the investment may be wasted in the long run if staff do not know how to use and maintain technology effectively. If grant funds do not explicitly cover technology planning, staff training and maintenance, nonprofits may not be able to use their technology to its full potential. Expensive IT investments risk going to waste, making future IT projects more difficult to justify or fund.”<sup>12</sup>

But is it chicken-and-egg? Are foundations not supporting training because nonprofits aren’t asking for it? Or are nonprofits not asking for it because foundations don’t fund it? In either case, too many IT grants are project-based, an approach that falls short of the comprehensive nature of technology networks and information flows.

Foundations are also exploring different approaches to technology funding—namely, generating revenue from the very technology nonprofits seek funding for. Despite the dot-com bust, private equity players are getting back into the habit of taking reasoned, long-term risks in technological innovation. The maturation of the Internet as a consumer communications and business platform, and the mainstreaming of social enterprise. Different business models for generating revenue (none of which include online fundraising) include: consumer advertising and sponsorship, paid membership/subscriptions, consumer e-commerce, B2B services, nonprofit-focused Internet software development, customer relationship management software, online training and education. [Scott]

But while they might be ready, their dollars are not showing up in the coffers of nonprofits. VPP surveyed XX number of organizations that are engaged in “venture philanthropy” or “high engagement grantmaking.” 25% of the respondents had yet to make their first grant! (8)

But these changing trends in grantmaking and other forms of revenue-generation may result in changes to the entire sector. “These technologies ... will initiate significant structural changes, not just in the organizations that use them, *but throughout the fields in which they are adopted*” [my emphasis] Traffic patterns on the Internet will give some larger more familiar nonprofits a big edge in fundraising and membership development. “E-philanthropy will do to nonprofits what Wal-Mart has done for local retail” – in other words, reduce the playing field of nonprofits to a few large institutions, eliminating the diversity and innovation of smaller organizations. “The real work is to imagine the profound structural changes these technologies will bring about in the sector and to consider how they will remake what it means to be an effective nonprofit and an effective grantmaker.”<sup>13</sup>

---

<sup>12</sup> “Beyond Access: A Foundation Guide to Ending the Organizational Divide,” by Bethany Robertson, National Committee on Responsive Philanthropy, December 2001.

<sup>13</sup> “More than Bit Players: How Information Technology Will Change the Ways Nonprofits and Foundations Work and Thrive in the Information Age,” by Andrew Blau for the Surdna Foundation, May 2001.

### **Recommendations for further Research**

Just looking at the existing literature, we can see a few recommendations for ongoing research rising to the surface:

- Support annual studies of nonprofit technology use that are thorough and scientifically sound.
- Explore the relationship between technology planning and effective use of technology.
- Support development of evaluation mechanisms and technologies to help nonprofits evaluate their effectiveness in applying technology to advance mission.
- Support the exploration of the role that larger nonprofits, especially national membership organizations, could play in increasing the capacity of their membership organizations.