

## **Technology and the Performing Arts Field: Usage and Issues**

Report on Research Commissioned by The Andrew W. Mellon Foundation, 2008-2010  
Conducted by NPower, Inc. and Callahan Consulting for the Arts  
September 2010

### **Executive Summary**

The world is constantly evolving in how it uses technology. In consequence, the arts field has struggled, adapted, and sometimes excelled in its own utilization of technology. To capture and better understand these trends, The Andrew W. Mellon Foundation commissioned a study of technology usage in the arts field to learn about organizations' practices and needs. This summary provides an overview of the study, which combines a comprehensive survey of the arts field with more recent in-depth qualitative research.

In late 2008, the survey was administered to the memberships of five discipline-based arts service organizations: the Association of Performing Arts Presenters (APAP), Dance/USA (D/USA), the League of American Orchestras (LAO), OPERA America, and Theater Communications Group (TCG). The large data set collected from the survey provided a rich resource of information about organizations' range of experiences and attitudes towards technology. Newer qualitative research was conducted through case studies and interviews. A combined analysis seeks to present the survey information in its full depth and nuance, and augment it with up-to-date material that reveals the sometimes profound changes that organizations have undergone in their use of technology since the survey.

Within the research, the experiences of non-profit arts organizations are examined, with special consideration to questions about their trials and successes: What are the most prevalent technological barriers that organizations face? How do these barriers affect their management practices—and what kind of toll do they take on staff and boards? In what ways have arts organizations demonstrated creativity, resilience and leadership in adapting to technology use? And what are possible solutions and programs that would support the field?

In order to better understand the true circumstances of arts organizations, the analysis identifies themes that recurred among all of these sources. These themes are presented visually to convey a sense of their relative prevalence and importance in responses. Then, each key theme is explored individually, to reveal the detail and trends that the surveys conveyed and to incorporate the new research (case studies and interviews), which updates and illuminates the survey responses.

The themes and highlights that emerged from this analysis hint at future directions for technology research in the non-profit arts field and better prepare Mellon and service organizations to design responses to the field's technology needs.

### **Approach and Methods**

#### **Data Sources**

The Original Survey Data. Mellon conducted the survey in conjunction with the nonprofit NPower. The instrument consisted of 72 questions, eight of which are qualitative, addressing resources, both human

**SUZANNE CALLAHAN, FOUNDER**

1712 I STREET, NW SUITE 808 WASHINGTON, DC 20006 **TEL** 202.955.8325 **FAX** 202.955.8324  
**EMAIL** CALLAHAN@FORTHEARTS.ORG  
**WEB** WWW.FORTHEARTS.ORG

and otherwise; management practices; attitudes toward technology use among stakeholders; and an array of other circumstances that affect organizations' use of technology. Questions were asked about how organizations plan in general, and technology planning in particular. Data were gathered, in part, to inform any responses Mellon might consider to address these issues, one of which was the design of a technology course for the arts field. A high response rate of 42% was attained, resulting in a data set of 594 organizations, which was found to be representative of the field.<sup>1</sup>

New Qualitative Analysis. The survey's eight qualitative questions were reviewed for frequency and intensity of themes. The four most substantive addressed pressing issues that organizations faced with technology, such as barriers to tech use and the success of recent projects.<sup>2</sup>

Interviews With Service Organization Heads. These leaders helped determine the representativeness of the data, obtain updates on members' use of technology, and test ideas from the data against their perceptions about their members' technology-related circumstances.

Case Studies. A series of interviews were conducted with select respondents in 2010 in order to delve deeper into the technological issues raised by survey questions and to highlight changes experienced by arts organizations since the survey. The case studies were chosen to achieve some representation of the following factors: organization type, venue, IT staff, budget size, artistic discipline, data management, and problem solving aptitude. Their budgets ranged from \$950,000 to \$11.5 million. They were ensured confidentiality to serve as an incentive to speak frankly to consultants, without worrying that their shortcomings would be known to Mellon. One to 10 staff members for each organization (a total of 24) attended the group interviews. Interviews sought deeper understanding of issues such as internal management, the interplay of staff with consultants, and particularly good or problematic areas of tech adaptation. Areas of tech use that have arisen or advanced since 2008, such as social media, and the effects of the recent economic downturn, were subjects of particular interest.

## Contextual Factors

Several factors are important in placing the analysis in context. *First, technologically speaking, times have changed radically since 2008, and it is clear that, to some degree, arts organizations have changed with those times.* The changes in technology use that took place in the nearly two years that elapsed between the survey and this analysis are highly evident in the case study interviews and interviews with leaders of the service organizations.<sup>3</sup> *Second, the diversity of respondents suggests different needs, strengths, and characteristics that affect how the data are described in the full report.* Inherent

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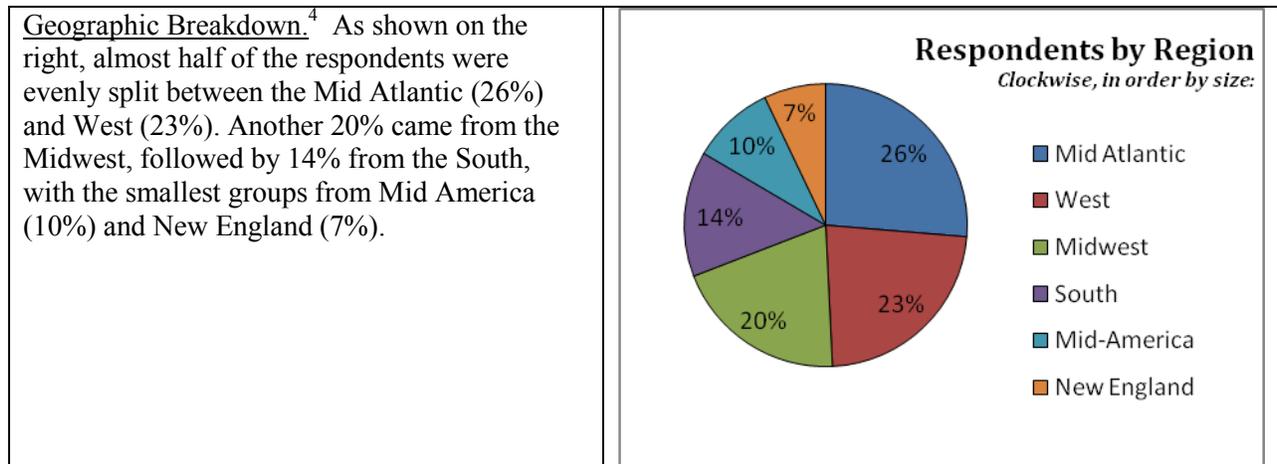
<sup>1</sup> To assess the survey's representativeness, the consultants compared survey respondents to evidence from three sources: service organization membership data, the National Center for Charitable Statistics, and in-depth interviews with service organization staff. The following conclusions were drawn: 1) The survey sample is generally representative. Factors such as revenue, size of staff, longevity, and location confirmed that the response rate and distribution of organizations was perfectly acceptable. 2) Geographic coverage is good, with the slight exception of New England. 3) Mid-sized organizations are more represented than small or large ones. 4) Responding organizations are slightly older than non-respondents. For a summary of this analysis and of respondents by state, see Appendices B and C in the full report.

<sup>2</sup> Throughout this report, "tech" refers to "technology," rather than any technical aspects of art production. The words "respondents" or "responses" always refers to survey respondents. The word "interviewees" or "interviews" refers to the conversations with case study organizations or service organization heads.

<sup>3</sup> In December 2008, NPower provided a draft report to the Mellon Foundation. Following additional analyses and an addendum completed in March 2009, the five service organizations met with NPower and Mellon staff in April 2009 to discuss the report. A recommendation was made to re-examine the data and possibly undertake interviews and case studies to acquire a deeper understanding of the findings. After gathering information, soliciting opinions from other experts, and considering next steps, Mellon contracted Callahan Consulting beginning in February 2010 to re-analyze the data, particularly the qualitative material, and conduct new research. The delay had the positive consequence of allowing Callahan Consulting to see changes in responses (over a relatively short period of time) and provided, in a sense, some comparison data.

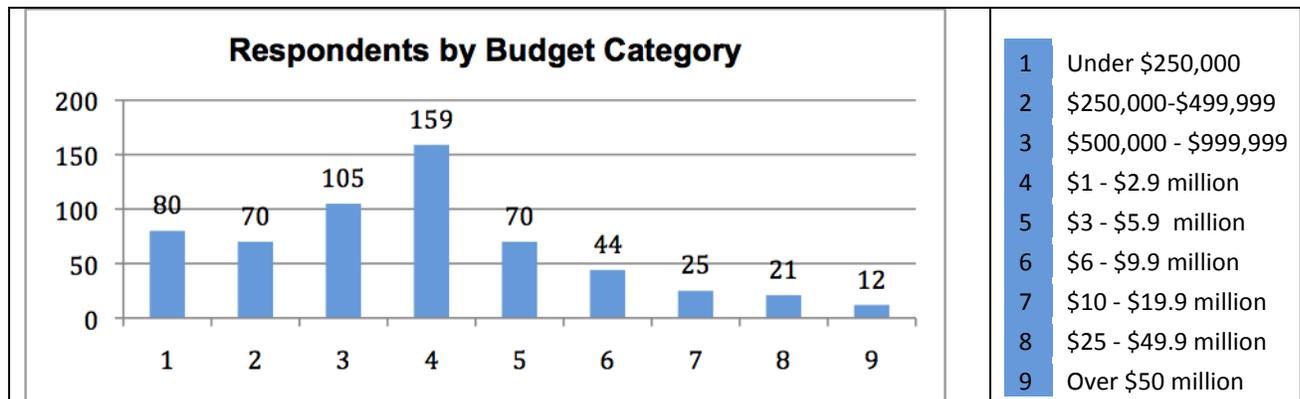
differences exist between producing organizations, which create and produce performances, and presenting organizations, which exist to join audiences with artists. A number of factors affect their need for technology, including access to, and management of, audience data, management of box office, and venue and audience size.

**Overview**



**Year Founded.** Respondents have longevity; nearly 85% (500) are over 20 years old. Only 15 were under five years old at the time of the survey.

**Budget.** Almost 44% of respondents' operating revenues were under \$1 million, and almost three-quarters (71%) were under \$3 million.



**Staff Size and Leadership of Respondents.** The majority of respondents (58%) had 10 or fewer employees. A larger majority (71%) had no designated IT staff. Most surveys were completed by executive directors (58%), and most respondents had four or fewer years in their role.

**Discipline.** While the overall representativeness of the five disciplines (dance, opera, orchestra, presenting, and theater) is good, some disciplines are more represented in the survey, and there is some variance in response rates by discipline. As the table below indicates, more than two-thirds of the sample is theater companies and orchestras. Dance companies, opera companies and presenters compose far less

<sup>4</sup> Regions were assigned in line with the NEA's regional arts organizations.

of the sample. Meanwhile, opera companies and dance companies were far more likely to respond to the survey than presenters, with theater companies and orchestras falling in between.<sup>5</sup>

<b>Distribution by Discipline</b>					
Membership Category(s)	Invitations Sent	Total Members Responding	Primary Membership (see Note 5)	Percent of Sample	Response Rate
Association of Performing Arts Presenters	275	80	48	13.5%	29.1%
Theater Communications Group	485	194	186	30.5%	40.0%
League of American Orchestras	545	233	231	37.5%	42.8%
Dance/USA	133	67	58	7.4%	50.4%
Opera America	110	63	59	9.6%	57.3%
No Primary Membership Assigned	-	-	9	1.5%	-
Undetermined Membership	-	-	3	.5%	-

## Technology Attitudes and Habits

**Current Technology.** When asked to describe their current technology, a full 80% of organizations considered their technology to be either only “serviceable” or “antiquated.”

**Perceived Barriers to Tech Usage.** Respondents were asked if they had experienced a series of barriers to effective adoption and use of new information technologies in the past five years. From the questions asked, three barriers emerged: lack of money (83% of respondents), lack of time (69%), and insufficient knowledge to make technological decisions (33%).

## Key Themes

Four of the eight open-ended questions framed a deeper understanding of the tech issues and needs facing respondents. Major themes that emerged from this close analysis of the qualitative responses are outlined below. They are followed by visuals that aid in understanding the recurrence of these themes among questions (the colors to the right correspond with the visuals).<sup>6</sup>

**Funding.** Respondents reiterated the sheer need for funds for technology in general or for specific tech projects, and the degree to which their lack of resources earmarked for technology was make-or-break to their success in using it.

**Integration of Data Systems.** Respondents registered their strong desire to purchase systems that would integrate their data, most often for ticketing and donor development. Occasionally mentioned were accounting, customer relationship management (CRM), general databases, and web interactions

<sup>5</sup> Eight percent (48) of respondents indicated membership in more than one of the organizations, most of which belonged to APAP and one or two other associations. In order to avoid confounding the analysis where discipline is involved, these organizations were assigned a “primary membership” based on their mission. Nine could not be determined. Subsequently, changes to these primary membership assignments were made, and 58 rather than 42 are now assigned to Dance/USA, and 48 to Arts Presenters.

<sup>6</sup> While the graphics presented here frame a picture of the qualitative findings, they are not meant to imply statistically significant findings, but more so an overview of the strong recurrence of issues.

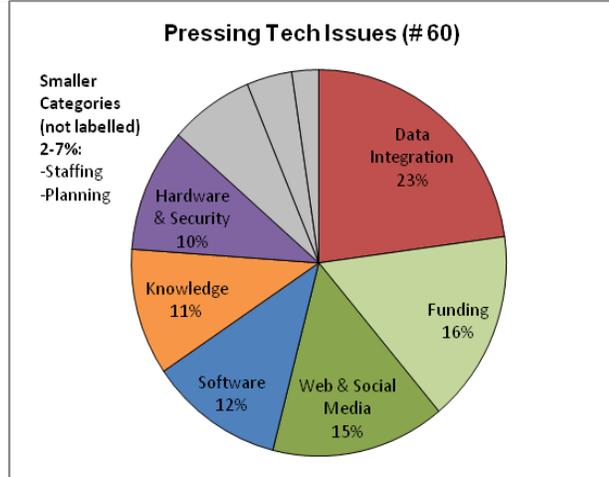
(e-blasts) with audiences. Some desired to integrate two or more systems to avoid duplicating their efforts in data entry and reporting.	
<u>Staffing (or Time) and Leadership.</u> <b>Respondents stressed the human resources that were needed to learn and use technology, often emphasizing the lack of available staff, given competing priorities for their time.</b> Time was considered a euphemism for staffing, which could include internal, contracted, and pro bono human resources, as well as related data about their attitudes, interactions, and leadership.	
<u>Up-to-Date Knowledge.</u> <b>Respondents desired more expertise and knowledge, so they could use technology to its fullest potential.</b> This included the process of researching and choosing technology. They strongly desired to <i>keep current</i> on technology trends in order to know how systems were changing. They desired <i>training</i> , so staff would know how to use the technology they purchased.	
<u>Upgrading Hardware and Other Technology.</u> <b>Respondents regularly had to replace hardware and software;</b> the need to purchase was never-ending and hard to pay for.	
<u>Upgrading Software.</u> <b>Respondents strongly desired to install and maintain up-to-date versions of software systems and products.</b> Sometimes responses were merely a long list of a wide range of software such as ticketing, box office, donor, operating systems, accounting, and database programs. Respondents often named the type but not a specific brand. The need for software was interrelated with the need for the knowledge to use it.	
<u>Web and Social Media.</u> <b>Respondents mentioned their goal of updating websites, with little specificity about how or to what end.</b> Some wished to update sites themselves and others wanted more ease updating sites, even if they worked with consultants to do so. Social media was rarely mentioned and tended to imply a general interest in usage rather than a strategy or success, though there were occasional references to blogs, podcasts and YouTube (remember that this survey was collected in 2008).	
<u>Smaller Categories.</u> Issues that appeared in 7% or fewer of the responses were: <b>planning and decision making</b> (often reflections on how lack of planning in tech projects hindered outcomes) and other (comments on miscellaneous areas, most often art production).	

Together, the qualitative questions reveal interesting consistencies and contrasts of these themes within the data, which are illustrated in the charts below. The analysis looks first at the urgency respondents felt in relation to their technology use—the breadth of pressing issues that needed to be addressed at the time of the survey. Then, a closer examination of recently undertaken tech projects reveals what worked, or did not work, in completing them; it shows an interesting convergence among the few themes that appear to make or break success. Finally, a visual shows ongoing barriers to adapting and using technology within organizations.

**Pressing Tech Issues**

**When asked about their most pressing technological issues, survey respondents revealed, in the aggregate, how the key themes above reflect their tech-related priorities. Of prime importance to them were software-related applications. Responses began to hint at how funding for, and knowledge of, technology were crucial in solving their tech issues.**

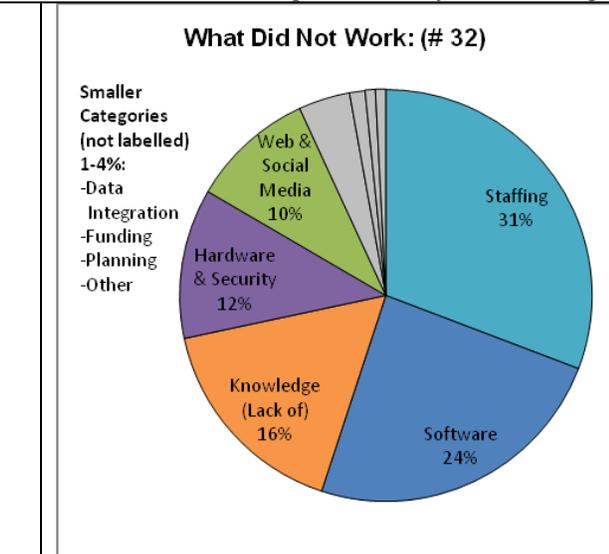
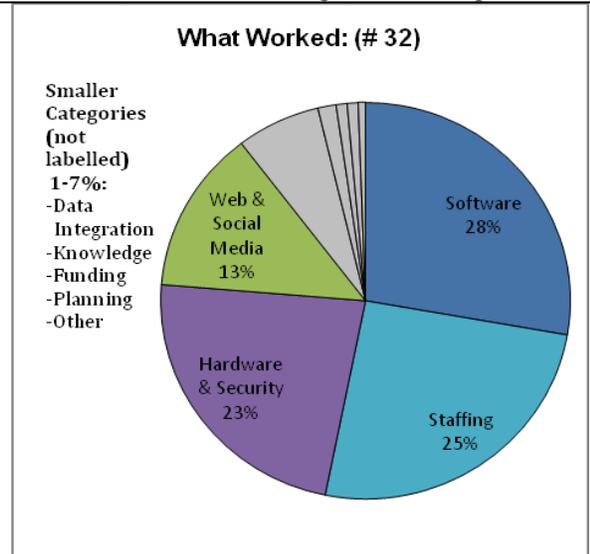
The most prevalent need was for workable **systems to integrate data**, mainly for ticketing and donors. Frequently mentioned was the need to stay up to date with a range of other **software upgrades** along with their **websites**; less frequently mentioned was learning to use **social media**. Finally, respondents lamented their need for **greater knowledge** of how to make the best use of software once it is installed. The dilemma, for some, was in realizing that they would need funds and knowledge of software to fully address these needs.



**What Worked and What Did Not Work in Implementing Tech Projects**

**One question asked about a specific “project” that had already been undertaken. Projects ranged from large and ambitious, such as converting to the Tessitura system, to small and commonplace, such as creating a Google Calendar. In completing these projects, there was a close divide between the staff-related factors that contributed to their success and those that were blamed for their failure. A prevalent factor emerges when projects failed: the lack of knowledge, as shown below.**

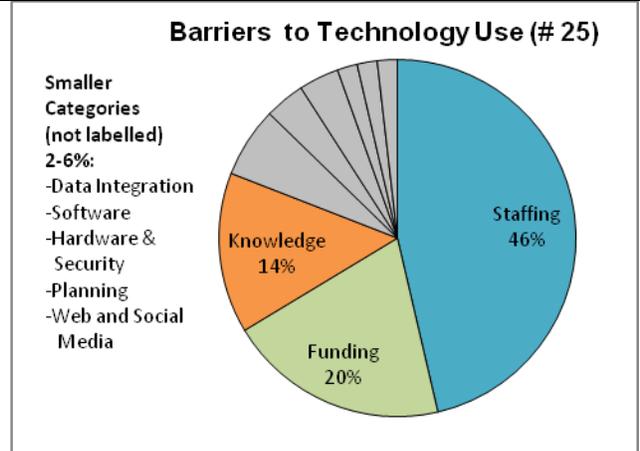
Here, the element of **staffing** could influence a project’s success, depending on whether or not staff was enthusiastic and working as a team (on the left), or whether they were resistant to, or insufficient for, the project (on the right). Again, respondents whose projects failed lamented the lack of know-how, due to either the shortfalls of staff or of the consultant/vendors they chose, who promised more than they delivered, lacked knowledge, or over-reported the abilities of the software products they were selling.



## Barriers to Technology Use

Interestingly, when asked about *barriers* to adopting and using technology effectively, responses focus largely on the lack of human and financial resources. This supports the notion, as presented above, that these factors were the means to an end, in their success.

As shown, the main barriers to usage were shortfalls in **staffing** and **knowledge**--as well as in financial resources, or **funding**. It appears that their perceptions of ongoing barriers to *usage* of technology related more to having the human power and expertise to know what to buy, how to operate it, and troubleshoot problems, as well as the funding to pay for it.



## The Case Studies: Updated and Deeper Impressions

The information gathered from the case study interviews serves to illuminate much of the data presented in the charts above. By creating a more in-depth picture of the technology needs and strengths of organizations, the case studies reveal the sometimes radical changes that took place in the two years that elapsed since the survey and give insight into the experiences that prompted the survey responses. The area in which case study organizations had the most experience and insight to share was recent technology efforts, which varied widely in their scope, ambition, and levels of success. Integration of software, particularly donor and ticketing systems, was a frequently mentioned project, as was using social media. The degree to which case study organizations had increased their interest in and emphasis on website enhancements related to what they now viewed as the potential of both these websites and social media to reach and cultivate audiences. This is a dramatic change from the original survey, which rarely mentioned social media. Interviewees were specific about their technological goals, and several demonstrated creative, forward-thinking attitudes. Still, the success that organizations experienced in their recent technological efforts was strongly tied not only to what they could afford but also to the amount of knowledge they possessed, and to their attitudes toward technology as positive challenges that would bring them opportunities and save time. The differences and continuities between the case studies and surveys are explored below.

## Key Themes

The Key Themes are presented in the order of their prevalence and/or importance to the data itself. This order coincides with how the themes are presented in the full report.

### Staffing and Leadership

Across both survey and case study responses, organizations were greatly impacted by their human resources—the amount of staff as well as their knowledge and training. Most lacked in-house IT staff, relying instead on a mix of contractors and other non-IT employees—which, survey responses revealed, were inadequate for their needs. Tech vendors received high praise and sharp criticism at

**both survey and case study organizations, as their role was seen as pivotal to a tech project's success. Even if employees lacked tech expertise, a positive, problem-solving mentality was sometimes enough to make tech projects succeed. Leaders that were committed to new technology made it easier to realize goals, while resistant leaders could be major barriers. Those on the board or staff who solved tech problems or took on projects were lauded as heroes. As survey responses showed, most staff and leadership in organizations recognized the importance of using technology. However, the lack of sufficient time and manpower to learn and operate new products was a source of frustration.**

On the survey, the vast majority of respondents (91%) cited "time" as a major barrier to tech use ("time" may be a euphemism for the need for more staffing to relieve overburdened workers). Given other priorities, staff's size, hours, and tech expertise were inadequate; only 14% of survey respondents thought they had sufficient IT support. Within the case studies, IT staff (whether internal or contracted), when it did exist, primarily focused on infrastructure and was usually not involved in actual data management or broader strategies related to tech use. This left non-IT staff to learn systems in order to retrieve information and set tech strategies.

On the survey, 58% of respondents received day-to-day tech support from contracted service providers, while 74% turned to professional IT consultants and 40% to vendors for advice. Some responses gratefully reported that vendors and consultants could contribute to tech projects' success. However, as other survey respondents lamented, with frustration and cynicism, the shortfalls of vendors were sometimes a major reason for the failures of their tech projects.

A theme across the case studies was that it mattered greatly who was advocating for new technology, and whether they were in a position of power. If leadership was committed to adopting new technology, the organization found it easier to make its technological goals a reality (as some survey responses agreed). However, case studies suggested that if leaders were resistant to adopting new technology, they became a hindrance to the process.

Despite the reservations about disinterested leadership expressed in some of the case study interviews, most survey respondents expressed positive attitudes towards technology on the part of staff and leadership. Survey data indicated only minimal resistance or disinterest towards technology, when compared to their concerns about lack of time and support. Most (83%) implied that their organization's staff were willing or able to adapt to new technology, and most (88%) agreed that their executive leadership had a clear vision for how technology supports the organization and advances its missions. 83% agreed that their board endorsed investments in new technology.

## **Up-to-Date Knowledge**

**Survey respondents and case studies stressed the need for increased technology knowledge and the ways in which lack of information about technology can deter tech usage and progress. Respondents wanted to make effective technological decisions and purchases, but lacked the time and expertise to conduct the necessary research. The fact, supported by survey responses, that over half of organizations had no budget for technology training shows the difficulty of keeping up with constant technological advancements.**

The vast majority of organizations (91%) on the survey felt that insufficient knowledge was a major problem in their current usage of technology. While over half of all organizations (55%) did not budget for technology training for staff (the incidence of tech training was increased at higher budget levels), even organizations with the budget and inclination to train staff still struggled with inadequate understanding of technology. While lack of funding was cited consistently as a reason why organizations

had not advanced technologically, case studies corroborated the sense on the survey that funding alone would not solve the tech problems within organizations but should be one element of a strategy that included an emphasis on learning.

Survey organizations were concerned that their grasp of technology was not strong enough for them to wisely choose, purchase, and use products. Guidance was needed to solve dilemmas about what to buy and how much money to invest in technology. Shortcomings in knowledge surfaced when organizations attempted to install software, and it became evident that staff lacked the ability and/or training to implement these new systems, sometimes leaving respondents with expensive programs they were not fully or effectively using.

## **Upgrading Hardware, Software, and Other Technology**

**Survey respondents discussed the constant struggle to upgrade their tech systems—including software, but also hardware and security programs. The difficulty of acquiring funds to accomplish these goals was a major barrier for many on both the survey and in the case studies. It became clear, particularly on the survey, that only about half of organizations had a budget line item to update their technology more often than every five years, and most did not keep up-to-date.**

The software programs most frequently cited as in need of updating were ticketing, donor, and financial systems; comments about hardware most often referred to computers and servers. Respondents stressed that they could not complete these projects because of lack of resources, and even those who did receive grants could have problems when associated costs escalated unexpectedly. Responses about product upgrades fell into three categories. In the first, software, updating basic operating systems, upgrading ticketing programs and getting online ticketing were priorities. The second type, hardware, also included concerns about aging equipment and being able to afford needed upgrades. The third type of upgrade was security for both systems and data—organizations were concerned about the possibility of losing valuable information if their systems failed, and wanted to ensure the privacy of online financial transactions. Similarly to survey respondents, a constant cry within every case study was for funding to pay for the necessary updating of hardware and software.

## **Tech Planning and Decision Making**

**Respondents tended to operate with strategic plans, and around half had one or more written plans for various areas of operations. While an implied shortfall within the survey was the lack of bona fide tech plans, case studies and service organization heads strongly suggested that some degree of tech planning is, in fact, being conducted within individual departments. Survey responses revealed that IT staff rarely participated in the strategic planning process, and conversely, board members rarely participated in technology planning, oversight, and/or decision-making. Decisions about technology appeared to be made in an ad hoc manner, as equipment broke and systems became outdated.**

On the survey, 80% of respondents reported having up-to-date strategic plans, and 60% had completed plans within the past three years. Most (62%) rated their ability to develop and implement plans as good to excellent, and organizations that had written tech plans rated their overall planning abilities highly. Those at higher budget sizes rated themselves higher at successfully developing and implementing plans. By the time of the case studies, little had changed in organizations' overall planning practices—all cases had a strategic plan.

Less than one-quarter of survey respondents had technological plans, and only 18% involved IT staff in planning. While none of the case studies had developed a formal or written technological plan, per se, they conveyed numerous examples of planning, progress and problem solving in the area of technology, including software installations and innovative use of technology for production. Most service organization heads agreed that tech planning was happening in more roundabout ways, within departments. Decisions about technology purchases fell on different people within different organizations. Most reported that their technology purchases were made on a case-by-case basis and heavily depended upon available funds. Whether this approach worked varied according to the organization, its attitude toward technology, and its resources.

Active planning and budgeting could contribute to survey respondents' successes with technology. Some seemed frustrated about the amount of staff time needed to complete projects; responses were split on whether this was due to inefficiencies or to unpredicted challenges during the implementation process, as well as how these shortcomings were affected by planning. Engaging in in-depth software research generally led to rewarding results. Understanding the end users of technology was crucial when making these decisions, including effectively matching the organization's needs with the product's true capabilities.

### **Integration of Data Systems**

**The topic of integrated software systems for data management was the most frequently reported tech need on the survey and continued to be a major issue in the case studies. Often the greatest success stories and worst disappointments that organizations reported had to do with the acquisition and installation of integrated software. Generally, organizations got these new programs for two major reasons: to better track donations and ticketing, and to decrease the burden of work for employees forced to use separate systems to enter donor data and track income. However, the extent to which organizations' software purchases met these needs appeared to depend heavily on both the systems they chose and the amount of technological training possessed by those who installed and operated them. Integrated software for accounting and box office was an aspiration of many survey respondents; service organization heads also emphasized this necessity.**

Case studies showed how urgent need could be a catalyst for moving to an integrated data management system, with several sharing stories about being forced to migrate to a new system when vendors discontinued their current product or when they could no longer stand the confusion and labor of using multiple systems.

One prevalent theme throughout both survey and case studies was uncertainty about which data integration system to choose, and with good reason: case studies showed that organizations who purchased software without knowing what they really needed could become saddled with an irrelevant product. Case studies revealed that the manner in which software was installed had a huge impact on its ultimate usefulness—while some made the transition to new software fairly smoothly, others did not know how to get the product working. Case study organizations whose staff lacked the knowledge necessary to install and operate their new programs found that these purchases led to more work for employees, not less. Successful installations, on the other hand, were often the result of careful pre-purchase research, staff who had technological expertise, and support from leadership and peers. Even after converting to new software, some survey respondents' programs would not integrate with their other systems. These problems seemed either the result of software incompatibility or the program being inaccurately advertised.

The responses gathered from organizations that had converted to integrated software in the survey and the case studies indicated that there were both strong advantages and disadvantages to using one unified system instead of the multiple databases they had before. Those that had installed programs such as Tessitura were for the most part very positive about their results, including the ease of compiling comprehensive donor/audience information, tracking finances, and cutting down on duplicate entry. One barrier, however, was the prohibitive cost of the new programs, including a huge upfront expense in addition to ongoing dues and add-on fees. A second barrier was the difficulty in installing and learning to operate them.

## Website and Social Media

**More than for any other issue, there was a striking change in attitude towards website and social media use between the time of the survey and recent interviews. Social media was barely addressed in survey responses, and website upgrades were treated as just one more non-specific tech need. However, during the interviews with case study organizations and service heads, it became clear that using social networking to reach out to and engage audiences was an increasingly high priority. The strategies for implementing these applications revealed that organizations had ambitious and dynamic goals for their online presence, even if they were not yet able to realize these goals.**

The small percent of survey respondents who mentioned social media mostly discussed it in terms of communication and outreach to audiences, such as email and e-newsletters, or were interested in using online tools for marketing strategies. On the one question that specifically addressed social media, responses indicated that 44% of organizations aspired to create a social-networking community for their audience members. However, by the time of the case studies and interviews with service organization heads, social media was a frequently discussed issue, and one that many were highly interested in pursuing. Since the time of the survey, every organization interviewed for a case study had increased its use of social media and Web 2.0 programs. The interviews with service heads also confirmed that members in all five disciplines had accelerated their use of, and interest in, social media as a new way to reach audiences.

The most frequently mentioned social media application in the case studies was Facebook, which was currently being used by every organization interviewed. Most used it to increase their online presence and to post updates and reminders about upcoming events. However, organizations' uses of Facebook varied and included gathering feedback from audiences, tracking audience demographics, and connecting with donors.

Perhaps because social media is young and lacking in success measures, some service organization heads questioned, based on their members' comments, whether social media was a short-term fad or long-term solution. However, case study organizations generally felt that the effects of social media, while hard to pin down, were positive. Most case study organizations did not know or were just beginning to measure the return on investment of maintaining social networks.

On the survey, when organizations mentioned their desire to upgrade websites, it was often as just one item on a long list of other pressing needs, without any further detail about how or why the website should be changed. Some aspired to use online tools to accept donations and to sell tickets. Those that had upgraded their websites were pleased with their enhanced ability to reach potential patrons. In contrast, the case study interviewees discussed the importance of their website to their artistic mission, displaying a forward-thinking attitude and increasingly planning highly specific strategies to improve the user experience. On both the survey and case studies the most successful and exciting web upgrades were those that used media, or interactive features, to involve audiences in everything from the creative process

to choosing performance seating. Case studies also revealed that organizations were increasingly using their websites as a marketing tool and an artistic platform. They appeared to be shifting their concept of the websites as a mere source of information to a holistic hub for cultivating their community of supporters, through audience engagement, ticket sales, and donations.

## Art Production

**The only other tech issue mentioned with much frequency or depth was art production, or the use of technologies such as video as an element in a performance.**

At the time of the survey, performance-related use of technology came up infrequently, although 48% of organizations aspired to use state-of-the-market production technology. However, several case study organizations passionately described their use of new technology as part of their artistic product, most commonly video (less frequently higher-tech lighting, sound equipment, and mechanized stages). Some organizations felt that audiences' and artists' expectations make new production technology part of the evolving language of art and storytelling. For these organizations, production technology was integral to their process. Not all organizations were equally enamored with using high-tech projection methods, some feeling they were peripheral to the overall artistic concept. The incorporation of technology into art raised issues related to ethics and union contracts, since new technologies might take work away from artists. Organizations also had to pay for new equipment and contractors to create these new effects.

### **Mellon Proposed Solutions**<sup>7</sup>

**Organizations were presented with several solutions for some of their technology needs. One possible intervention Mellon asked about was whether a course on strategic technology planning, to be designed by an intermediary, would be beneficial to the field. During the case studies, the possibility of creating a website for comparative software reviews was also mentioned. Opinions from both survey respondents and case study interviewees were mixed. Endorsements and suggestions for content were given, as were reservations related to the usefulness, relevance, and necessity of each suggestion. Because of Mellon's interest in supporting a technology course, this section also addresses survey questions about organizations' professional development practices, including their willingness to pay for such training.**

87% of survey respondents either had no line item in their budgets for professional development or an insufficient one; however, organizations had pursued professional development opportunities in the past and usually had to pay for them (respondents' ability to pay for professional development might have been affected by the economic downturn, such that the lag between the survey and report might have resulted in different observations). The professional trainings that respondents pursued most often included fundraising (74%), marketing (65%), and management (53%). 33% had attended technology trainings, most frequently related to database management, marketing and web presence.

### **The Suggested Technology Course: Endorsements and Reservations**

Of the 552 survey respondents who answered the question about whether a technology course would be useful to them, about 80% felt that it would; 20% (111) were largely uncertain or doubtful that a course would be useful (the question did *not* ask whether respondents would attend and/or pay for such a course). Although most of the case study organizations had noted on the survey that they would "definitely"

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<sup>7</sup> Mellon has already incorporated feedback from this section into a pilot course (discussed in greater detail below). It is important to note that, once this pilot course was designed and offered to an invited group on a tuition-free basis, there was a high response rate.

benefit from a strategic technology planning course, they were more ambivalent during the interviews. The reservations expressed by the case study organizations and by the survey respondents were similar: they questioned whether the course could be at once general enough to apply to many organizations and specific enough to benefit individual entities. Others felt they were unlikely to benefit from the course because they already used similar resources (especially Tessitura, which provides its own training courses and online discussion forums). On the survey, funding was also a frequently cited concern, along with internal issues such as lack of time or staff to attend. There was one area in which case studies were in agreement: they would attend a course that emphasized new trends and cutting-edge ideas in the field, such as social media.

## **Comparative Website**

Case study interviewees were presented with an idea for a new website that would contain both expert and user reviews of software programs that were relevant to arts organizations, as well as a system to offer peer feedback for users to exchange information about these systems. Most questioned if a website could be both broad and specific enough to meet a variety of organizations' needs and wondered if it would be more suitable to smaller entities. Those that were most interested in the comparative software website felt that its appeal would lie in its convenience, neutrality, and specific relevance to the arts field. Some liked the idea of a website that was more strictly moderated than some current forums, and a few suggested that it should feature reviews from the arts field and not from vendors.

## **Implications and Recommendations**

The following points are suggested for discussion about using the information in this report.

### **Funding**

If funding is to be provided to organizations for technology, perhaps steps should be taken to increase the likelihood that plans will be implemented and systems will eventually be used well. Any funding provided for projects could require a research phase to choose the best systems, a process for vetting consultants and checking their references, and a plan that identifies roles for key players and includes a detailed budget with anticipated additional costs that may arise. A mandatory training phase for staff, and assurances that senior staff will learn and use the software, could also be wise steps to safeguard against failure and non-usage. In lean economic times, the sheer power of dollars to make purchases and implement plans should not be underestimated.

### **Building Knowledge and Shared Resources**

The arts field, particularly smaller and mid-sized organizations, would benefit from strategies that are designed to increase knowledge and encourage sharing of information and expertise. Establishing shared resources could help avoid duplication of efforts and build an information base that is applicable to the arts field. The idea of a shared website is worthy of continued consideration, but should take into account the concerns and endorsements raised by the research. To be most useful, the website would have to avoid duplicating resources or endorsing one particular approach, product, or vendor. Questions for future research on a website might include who the site's target audience is, what information should be offered, what are the best ways to link arts practitioners who use the same software, what could be learned from the way Tessitura offers its training and installation, and whether other nonprofit fields are grappling with the same issues and have addressed these problems.

The concerns from the findings can be used to enhance the design for the new technology course. However, the near-unanimous interest in social media and new trends in technology implies that they would be useful elements of the course. Within the curriculum, the topic of technology planning should bear in mind ways in which organizations' planning practices cut across programs and job functions, along with the ways in which they make decisions about technology costs.

### **Up-to-Date Research on Technology Usage**

Research on the arts field's technology-related issues should be conducted and shared at some regular interval, so that the stakeholders who are dedicated to serving that field can stay informed and craft meaningful responses. This analysis has pointed out gaps in knowledge and implications for future data collection. Due to the breakneck speed at which technology is changing, it would be ideal to establish an iterative and continued flow of feedback and information. A shorter instrument could be developed, adding questions about areas such as software, social media, the titles and roles of individuals who share technological duties, tech planning and strategies, and new trends or shifts in the barriers covered in this report. To ensure a short feedback loop, conducting a brief survey every one to two years would be ideal. To avoid over sampling of the same members, service organizations could distribute it to half of their members every other year. Findings should be shared widely with the entire arts field, providing a valuable service not only to the funding world but to the discipline-based service organizations and their members. Mellon may also opt to combine that research with some review of its own pilot course, allowing course revisions to be informed by up-to-date feedback from the field.

### **Postscript from The Andrew W. Mellon Foundation**

Since 2008, the Mellon Foundation has targeted funding to organizations working in areas that seek to address the challenges identified through the survey; this funding includes grants to: the dance company Misnomer to support the Audience Engagement Platform; Fractured Atlas to support ATHENA Tix, an open source ticketing system geared toward lightly institutionalized performing arts organizations; and Corporate Council for the Arts to support Project Audience, which aims to build technologies to help service organizations encourage more people to get involved in the arts and culture.

As a direct response to the findings of the survey, the Foundation also made a grant to the Non-Profit Technology Enterprise Network (NTEN) to support the development and pilot of "The Art of Technology," a course for nonprofit arts organizations, in collaboration with NPower and Idealware, focusing on core technologies, social media, and data management. A beta version of the course is being presented to an invited group of New York-based performing arts organizations over several months beginning in August 2010, and will be assessed once complete. The course includes an online curriculum overview and technology self-assessment, a two-day on-site training session, and a series of online seminars and conference calls.

*Callahan Consulting for the Arts helps arts organizations and funders realize their vision through services in planning, fundraising and evaluation.*

CALLAHAN CONSULTING

*for the arts*

# Technology and the Performing Arts Field: Usage and Issues

Report on Research Commissioned by The Andrew W. Mellon Foundation, 2008-2010  
Conducted by NPower, Inc. and Callahan Consulting for the Arts

September 2010

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**SUZANNE CALLAHAN, FOUNDER**

1712 I STREET, NW SUITE 808 WASHINGTON, DC 20006 **TEL** 202.955.8325 **FAX** 202.955.8324

**EMAIL** [CALLAHAN@FORTHEARTS.ORG](mailto:CALLAHAN@FORTHEARTS.ORG)

**WEB** [WWW.FORTHEARTS.ORG](http://WWW.FORTHEARTS.ORG)



## Acknowledgements

A project of this size that reports on a large segment of the arts field is only possible with the dedication and diligence of many organizations and individuals.

At Callahan Consulting for the Arts, a team of artists/administrators helped analyze this data and conduct new research. Led by Suzanne Callahan, they included: Barbara Russo, Client Associate; Caitlin Servilio, Associate Writer; and Shannon Seeger, Research Assistant. John Painter, Independent Consultant and Former Research Faculty at UNC-Chapel Hill School of Social Work, was instrumental in the overall quantitative analysis. Princeton University student Michael Benediktsson assisted with analyzing some aspects of the data, including its representativeness.

With Mellon's help, NPower provided a representative set of data for the analysis. The original survey was written by Alex Wilkinson and others on staff at NPower, with guidance from Diane Ragsdale and Christopher J. Mackie from The Andrew W. Mellon Foundation. Additional feedback was provided by Marc A. Scorca at Opera America and Jesse Rosen at the League of American Orchestras. The five discipline-based service organizations that distributed the survey to their members and diligently followed up with reminders included: Jan Wilson and Jesse Rosen at the League of American Orchestras, Andrea Snyder at Dance/USA, Teresa Eyring at Theater Communications Group, Marc A. Scorca at Opera America, and Sandra Gibson at the Association of Performing Arts Presenters.

These same heads of the five service organizations also agreed to conduct interviews and provided related information about their members, so that the final report would benefit from their knowledge and impressions of their field.

Most importantly, the 594 respondents are acknowledged for their contributions of time and information. Additionally, eight of these organizations consented to a case study and provided hours of staff time to give interviews and provide information, so that the field could learn from their successes and challenges. Their input was crucial to gathering the nuance and understanding that is presented here.

## Synopsis

The Andrew W. Mellon Foundation (Mellon) commissioned a study of technology usage in the arts field to learn about its practices, accomplishments and needs. Data came from a variety of sources. A 72-question survey was administered in August 2008 by Mellon in conjunction with the nonprofit NPower to the memberships of five discipline-based arts service organizations: the Association of Performing Arts Presenters, Dance/USA, the League of American Orchestras, OPERA America, and Theater Communications Group. The survey's eight qualitative questions were reviewed for frequency and intensity of themes, and four of them framed a deeper understanding of the tech issues and needs facing respondents. In 2010, interviews with service organization heads helped determine the representativeness of that data, obtain updates on members' use of technology, and test observations of the data against their perceptions of their members. Case studies were then conducted to create an in-depth picture of the technology needs and strengths of organizations, give insight into the survey responses, and reveal the sometimes radical changes that took place in organizations' tech use since the survey.

Two factors place the analysis in context. First, technologically speaking, times have changed radically since 2008 and, to a degree, arts organizations have changed with those times. The changes in technology use between the survey and this analysis are highly evident in the case studies and interviews with service organization heads. Second, the functional distinctions of respondents as presenters and producing organizations suggest differences in their needs for technology that might affect their responses, and thus how the data are described in the report.

Almost half of the survey respondents were evenly split between the Mid Atlantic and West, and almost three-quarters (71%) has operating revenues of under \$3 million. The majority (58%) had 10 or fewer employees. A larger majority (71%) had no designated IT staff. While the overall representativeness of the five disciplines was good, some disciplines were more represented in the survey, and there was some variance in response rates by discipline; more than two-thirds of the sample was theater companies and orchestras. When asked to describe their current technology, a full 80% of organizations considered it to be either only "serviceable" or "antiquated." When respondents were asked if they had experienced barriers to effective adoption and use, three barriers emerged: lack of money (83%), lack of time (69%), and insufficient knowledge to make technological decisions (33%).

Across both survey and case studies, organizations were greatly impacted by their human resources—the amount of staff as well as their knowledge and training. Most lacked in-house IT staff, relying instead on a mix of contractors and non-IT employees which, survey responses revealed, was inadequate for their needs. Tech vendors received high praise and sharp criticism, as their role was seen as pivotal to a tech project's success. Even if employees lacked tech expertise, a positive, problem-solving mentality was sometimes enough to make tech projects succeed. Leaders that were committed to new technology made it easier to realize goals, while resistant leaders could be major barriers. Those who solved tech problems or took on projects were lauded as heroes. Survey respondents and case studies stressed the need for increased tech knowledge and the ways in which a lack of information about technology can deter usage and progress. Respondents wanted to make effective technological decisions but lacked the time and

expertise to conduct the necessary research. The fact that over half of survey organizations had no budget for tech training shows the difficulty of keeping up with technological advancements. Respondents tended to operate with strategic plans and around half had other written plans for some areas of operations. While an implied shortfall within the survey was the lack of bona fide tech plans, the interviews strongly suggest that tech planning is, in fact, being conducted within individual departments. Decisions about technology, however, appeared to be made in an ad hoc manner as equipment broke and systems became outdated.

The topic of integrated software systems for data management was one of the biggest issues on the survey and continued to be so in the case studies. The greatest success stories and worst disappointments that were reported had to do with the acquisition and installation of integrated software. Generally, organizations invested in new programs for two major reasons: to better track donations and ticketing, and to decrease the burden of work for employees forced to use separate systems to enter donor data and track income. However, the extent to which these software purchases met their needs depended heavily on both the systems chosen and the amount of technological training possessed by those who installed and operated them. Integrated software for accounting and box office was an aspiration of many survey respondents; service organization heads also emphasized this necessity. Survey respondents faced constant struggles to upgrade their tech systems, including software, hardware and security. Acquiring funds to accomplish these goals was a major barrier on both the survey and in the case studies. Only about half of survey respondents had a budget line item to update their technology more often than every five years, and most did not keep up-to-date.

More than for any other issue, there was a striking change in attitude towards website and social media use between the time of the survey and recent interviews. Social media was barely mentioned on the survey, and website upgrades were treated by respondents as just one more non-specific tech need. However, case studies and service heads made it clear that using social networking to engage audiences was an increasingly high priority. Organizations had ambitious and dynamic goals for their online presence, even if they were not yet able to realize them.

Organizations were presented with two solutions for their tech needs. One, a strategic technology planning course, was suggested to both survey and case studies. Then, the possibility of creating a website for comparative software reviews was presented to case studies alone. Opinions of both solutions were mixed. Reservations related to the specificity, usefulness, and relevance of each suggestion, as well as the ability of organizations to pay for the course.

Several recommendations are made. Funding is crucial to organizations' success, but if given, steps should be taken to ensure that tech plans will be implemented and systems will be used well. Strategies that increase knowledge and encourage sharing of information will benefit the field, particularly small and mid-sized organizations. A shared website is worthy of consideration, if it takes into account the concerns above. Regular research should be conducted on the arts field's technology issues, so stakeholders who are dedicated to serving the field can stay informed and craft meaningful responses. Since 2008, Mellon has addressed some of the challenges identified in the study, through direct grants to arts organizations, as well as to the Non-Profit Technology Enterprise Network (NTEN) to develop the course "The Art of Technology" for nonprofit arts organizations.

## Introduction

The world is constantly evolving in how it uses technology. In consequence, the arts field has struggled adapted and sometimes excelled in its own utilization of technology. In 2010, The Andrew W. Mellon Foundation (Mellon) contracted Callahan Consulting for the Arts (Callahan or CCA) to analyze a recent survey of the arts field's use of technology and to conduct related research. This consultancy would:

- Leave Mellon with a nuanced analysis of the experiences and stories within the data, providing a fuller picture of arts organization's practices and needs.
- Convey the range of experiences and some of the meaning behind the arts field's struggle to integrate technology into their operations and programs.
- Better prepare the Foundation to design a response to the field's technology needs.

Mellon conducted the original survey in conjunction with NPower, a nonprofit that supports the technology needs of other non-profits. The survey was administered in August of 2008 to the memberships of five discipline-based arts service organizations: the Association of Performing Arts Presenters (APAP), Dance/USA (D/USA), the League of American Orchestras (LAO), OPERA America, and Theater Communications Group (TCG). The purpose of the analysis was to integrate Callahan's perspective from the performing arts field into the interpretation of the data.<sup>1</sup> The analysis would be augmented with additional research, including the perspectives from select national arts leaders.

Questions explored during the analysis were:

- How representative are the data, according to leaders from the arts disciplines that were surveyed?
- What might the qualitative data show about respondents' experiences with technology?
- How are arts organizations unique in the way they work? What are any related implications for their technology use?
- What are respondents' ranges of experiences with technology, both successful and failed?
- What is the range of attitudes toward technology use on the part of the staff of arts organizations that responded? What appears to have generated their mixed feelings about it?
- What could be learned from the barriers to successful technology usage? What are the most prevalent barriers? If respondents need ~~more~~ "more funding," how do they intend to use such funding to solve their technology problems?
- How, through limited additional data gathering, might Mellon learn the fuller story of organizations' experience with technology? The desire was to go beyond the short answers that were submitted through its survey to reveal a more comprehensive picture.
- How has the arts field's use of technology shifted, even since this survey was administered?

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<sup>1</sup> Callahan has run arts funding programs for almost 20 years, currently for Dance/USA's Engaging Dance Audiences, which involves technology use. A company profile appears at the end of this report.

- What are the perspectives of service organizations' leaders, regarding their members' experiences with technology? Do findings converge, or diverge, from these leaders' impressions of their members?
- What are any implications for next steps?

## Methodology

In order to address those questions the following steps were taken:

- Review of Original Study. An existing report on the survey, completed by NPower in 2009, was reviewed in detail to develop a list of observations and questions that could be of interest and use to Mellon. Questions were discussed with Mellon staff and NPower. This helped focus the new qualitative review and other aspects of the project.
- Preliminary Review and Analysis of Data. The data were acquired and reviewed to assess their statistical representativeness.
- Initial Query of Service Organization Heads. As the analysis proceeded, interviews were conducted with the heads of the five service organizations to compare findings against their impressions of their memberships.
- Analysis of Quantitative Data. The review included frequencies and distribution of select variables as well as comparisons of key variables, such as budget size. It took into consideration the distinctions in operations of performing arts organizations, when compared to other nonprofits.
- Analysis of Qualitative Data. Data were reviewed closely to identify recurring themes and develop a nuanced, coded, and in-depth analysis.
- New Case Studies. In April and May 2010, Callahan selected eight organizations to interview for a series of case studies that would delve deeply into the technological endeavors of the arts field. The case studies augmented the survey data by telling a fuller story from a more human perspective and by checking in with organizations nearly two years after the survey was completed.
- Final Report Preparation and Submission. Findings were consolidated into this report to be shared with Mellon staff and service organizations for response.

## Data Sources

The breadth of the original data, coupled with the new research, provided a wide range of information sources for analysis and comparison.

### The Original Survey Data

The purpose of the original survey was to assess needs and practices around information technology planning and uses at nonprofit organizations in the performing arts. The protocol and instrument appear in Appendix A. The survey consisted of 72 questions, eight of which were qualitative. The survey was broad in the types of questions it asked, addressing resources, both human and otherwise; management practices that would affect technology use; attitudes toward technology among stakeholders, both board and staff; and an array of other circumstances that might affect organizations' successful use of technology. In particular, questions were asked about how organizations plan in general, as well as how they plan, budget for, and make decisions about technology.<sup>2</sup> Data were gathered, in part, to inform any responses Mellon might consider to address these issues, one of which was the design of a course on technology for the arts field. An impressive response rate of 42% was received from 594 of the service organizations' members.<sup>3</sup> This comprehensive respondent list was found to be representative of the field.<sup>4</sup> Further detail on representativeness can be found in Appendix B. A breakdown of all respondents, by state and discipline, appears in Appendix C.

### Review of Qualitative Questions

All eight of the qualitative questions were reviewed for frequency and intensity of themes. Four of these questions were the most substantive, addressing pressing issues that organizations faced with technology, barriers to tech use, and recent projects undertaken, both successful and unsuccessful. The methodology used for this content analysis will be explained below in the Overview. A summary of the responses to these questions appears in Appendix D.

### Interviews with Service Organization Leadership

Interviews with these leaders helped determine the representativeness of the data, obtain updates on members' use of technology, and test ideas presented in the data against their perceptions about their own members' technology-related circumstances. These heads were impressively

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<sup>2</sup> As with any research project, the analysis provided insight into how the wording of questions was interpreted by respondents. In a few instances, notes are provided about how wording may have affected responses.

<sup>3</sup> The original survey was administered online and on paper in August-September of 2008 to 1,548 organizations. A letter was sent from Mellon to nonprofit organizations inviting them to participate. Respondents' identities were kept separate from the data, and only known to the consultants but not Mellon. For more information on the collection of responses, see Appendix A.

<sup>4</sup> According to NPower's original analysis of the data, "responses to the survey came from 594 organizations, representing 42% of the estimated 1,424 unique organizations invited." To assess representativeness, Callahan Consulting compared data to the full memberships of the five service organizations, as well as to comparable data from the National Center for Charitable Statistics, which maintains a wide range of data on non-profit organizations. Statistical analysis relating to representativeness was provided by consultant Michael Benediktsson. The firm also queried the service organizations directly. The respondent list was found to be representative.

accurate about what was later learned in the case studies, as well as the deeper meaning that was found in the qualitative data.

## Case Studies

A series of interviews were conducted with select respondents to illustrate a typical “picture” of the technology experience within organizations, and how these issues and barriers play out internally. The case studies were chosen to achieve some representation of the following factors:

- *Organization type*: at least one multidisciplinary presenter, season-based producing organization, and touring entity.
- *Venue*: organizations that performed regularly in the same venue (and presumably used the same ticketing system) and those that toured or self-produced in a range of locations.
- *IT staff*: those with IT staff on board and those without such staff.
- *Budget*: several small and mid-sized organizations, along with a large one.
- *Discipline*: at least one from each of the five disciplines (dance, opera, orchestra, presenting, and theater).
- *Data management*: several that struggled with integration of data systems, and could offer insight into the challenges they faced.
- *Problem solving aptitude*: some representation by organizations that have been successful at solving tech problems, particularly managing audience and donor data, such as a group of organizations that has used Tessitura successfully.

Final choices took into account two factors. First, the representativeness of other issues or themes that were present in the qualitative analysis. In particular, organizations were chosen if they struggled with the integration of ticketing and donor software which appeared to be a major and representative issue. Some balance was sought between those that had greatest need and those that had found promising solutions. The other factor was intensity and/or level of detail within comments made regarding their issues, meaning that their comments on the original survey indicated that they would tell a useful story.<sup>5</sup>

Organizations were asked for an interview and ensured confidentiality, which was to serve as an incentive to agree to speak to consultants with the frankness that this study requires without feeling concerned that their shortcomings would be known to Mellon as a national funder. For that reason, their identities have been removed from the case studies, and an overview of the aggregate demographic characteristics is given instead.<sup>6</sup>

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<sup>5</sup> Those in the mid-range of budget size were slightly oversampled, for two reasons, both of which coincide with Mellon’s own hunches. One: broadly speaking, respondents at these budget levels indicated tech problems that might be helped by outside assistance; the smallest organizations were likely too small to benefit from outside help, based on not only their size but their qualitative responses, and the largest ones had more capacity to solve their own problems. Two: the group with mid-sized budgets may be most likely to attend, and benefit from, a class; this too is based in part on their qualitative responses.

<sup>6</sup> Care has been taken to remove all identifiable information, including staff titles and software names, if there was a chance that respondents could be identified from it.

Group interviews lasted 45 to 90 minutes and took place with one to 10 staff members for each organization, who worked in executive leadership, general management, marketing, fundraising, technology, production, external affairs and social media (a total of 24 participated). Consultants reviewed survey data and websites, and tailored questions accordingly. Questions addressed the following:

- Demographics asked in the original survey, which were confirmed and/or updated.
- Other demographics were added, such as clarifying if staff figures included administrative, artistic, or both, and the specific types of software being currently used for ticketing and donor management.
- Additional understanding of circumstances or issues, beyond what was in the NPower survey, in areas such as internal management that might affect tech usage, the interplay of staff with consultants, or particularly good or problematic areas of tech adaptation.
- Areas of tech use that have arisen or advanced since 2008, including social media and production-related usage of technology.
- The effects of the economy on the organization overall, considering that any technology plans stated in the NPower survey in 2008 may have been sidetracked by funding cuts.

While not assumed to be representative of all themes among the extensive data that NPower has provided, these cases successfully explored many key issues, provided nuance and context for the challenges behind the numbers, and gave updated perspectives on the arts field's progress with technology use.

## Contextual Factors

Several factors are important in placing the analysis in context.

*First, technologically speaking, times have changed radically since 2008, and it is clear that, to some degree, arts organizations have changed with those times.* This process was complicated by the amount of time that elapsed between the original survey in August 2008 and this report—nearly two years. Changes in technology usage by arts organizations were highly evident in the case study interviews, some of which covered topics that were not commonly adapted by the arts field at the time of the 2008 survey.<sup>7</sup> Additionally, both the case studies and interviews with leaders of the service organizations confirmed these changes.<sup>8</sup>

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<sup>7</sup> At the time that case studies were done, most of the substantive qualitative questions on the NPower survey had already been coded and/or analyzed.

<sup>8</sup> In December 2008, NPower provided a draft report to the Mellon Foundation. Following additional analyses and an addendum that was completed in March 2009, the five service organizations met with NPower and Mellon staff in April 2009 to discuss the report. While no clear next steps emerged, a recommendation was made to re-examine the data and possibly undertake interviews and case studies to acquire a deeper understanding of the findings. Mellon spent the following months gathering information, soliciting opinions from other experts, and considering next steps. A contract with Callahan Consulting for the Arts began in February 2010 to re-analyze the data, particularly the qualitative material, and conduct new research through the eight case studies as well as interviews with the heads of the five service organizations. The delay between the data collection and the subsequent analysis and interviews had the unanticipated positive consequence of allowing Callahan Consulting to see changes in responses (over a relatively short period of time) and provided, in a sense, some comparison data.

*Second, the diversity of respondents suggests different needs and strengths, and characteristics that might affect how the data are described in this report.* Inherent differences exist between *producing organizations*,<sup>9</sup> which create and produce performances and include dance companies, resident theater companies, operas and symphonies, and *presenting organizations*, which exist to join audiences with artists. There are also hybrids; regardless of whether they are in a role as producing organizations or presenters, symphonies and resident theater companies have their own audience base that subscribes each season or purchases single tickets. (Some producing organizations, particularly resident theaters, rent out their venue, but more to generate income than fulfill their mission.) A number of factors distinguish their operations and related need for technology.

- Access to, and management of, audience data. While both presenters and producing organizations cultivate audiences, their access to and uses of data may differ. Presenters are reliant on a wide audience base to attend their array of performances, a percentage of whom will eventually become donors. They commonly interface with ticketing software and may use donor software. Depending on their size, whether or not they are primarily touring or place-based, and the ticketing vendor used, producing organizations may not always have access to audience information or as great a need for data management as presenters. Presenters often promote a diverse range of offerings which requires them to do more sophisticated audience segmentation. Assuming they use an in-house system or vendor that will provide audience demographics, they are, generally speaking, the keepers and managers of all audience data. In contrast, touring companies are often not permitted to access their audience data from performances on tour (and in some instances even if they rent the spaces in which they perform).
- Management of venue and box office. Some producing organizations, particularly resident theaters, operate their own facility, manage their own ticket sales, and always perform onsite. Operas or orchestras may be a resident company at a presenting facility, and this ongoing relationship might provide them access to data, whether they are presented or self-produced. Dance companies tend to either tour or rent facilities for short durations to self-produce and commonly rotate venues (very few operate their own performing space).
- Venue and audience size. The number of audience members for performances varies. Small houses of 100 host several thousand annually, while other venues host hundreds of thousands of people per year.

These distinctions have implications not only for arts organizations' *access* to data about their audiences and prospective donors, but their *need for technology and data management*, and even, perhaps, for their *responses to the original survey*. While these distinctions could not be determined for respondents, they are nonetheless crucial to remember in interpreting the results.

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<sup>9</sup> This is not to be confused with *producers*, a term that is typically associated with commercial entities that invest in and promote performances, such as Broadway shows, primarily to draw large profits.

## About This Report

The Executive Summary highlights the main findings of this project. The Report begins with an Overview of Findings, which gives a broad view of the data, including the characteristics of respondents, their attitudes toward technology, and their habits in tech use, planning, and decision making, among other areas. The qualitative analysis is outlined, along with the major themes in eight key areas. In subsequent sections, called Key Themes, the detailed findings are divided thematically to convey, across data sources, the degree of consensus and urgency surrounding topics that dominated participants' technology practices. Within those sections, excerpts from case studies illustrate the ways in which these tech-related issues played out within the organizations interviewed. The final section gives recommendations for consideration. A Postscript, provided by Mellon, conveys the steps that the Foundation has already taken to address the needs expressed in this report. The Appendices provide a report on representativeness of the data; a breakdown, by states, of respondents; the original survey instrument; and summaries of the qualitative analysis.

*Within each Key Theme, consistencies among the survey data, case studies, and viewpoints of the service organization heads are intentionally presented in order to show the sometimes striking parallels among these data sources. Such overlaps lend a higher level of confidence in drawing conclusions. In most instances, these Themes begin with a summary of the case study findings, which provide the greatest depth of experience and the most up-to-date perspective. Case studies are followed by survey data, both the qualitative analysis and quantitative statistics, which indicate the degree of consistency or contrast from that much larger data set.*

Throughout this report, the terms below are used as follows:

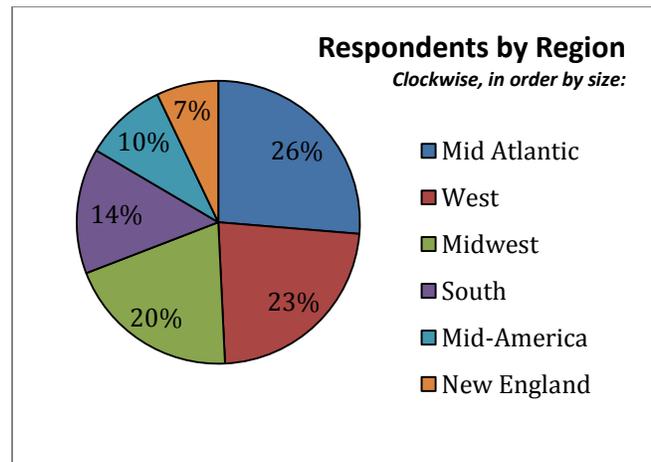
- Tech" refers to technology, rather than technical aspects of artistic production.
- Respondent" refers to those arts organizations that responded to the survey.
- Interviewee" refers to those interviewed for the case studies or from service organizations.
- Representative" refers to either people interviewed from the service organizations, or for case studies, depending on the context.
- Organization" is used interchangeably, to refer to either survey respondents or case study subjects.

## Findings: Overview

Findings begin with a broad view of the ways in which participants responded across a range of survey questions, both quantitative and qualitative. The key characteristics cover demographics such as budget, staff size, and planning practices. The two sections that follow cover respondents' technology attitudes and habits. Then, an overview of the qualitative data presents what was found from the open-ended questions. Subsequent sections of the report (Key Themes) examine more closely the topics and issues that were present across the data, highlighting the similarities and contrasts while introducing other quantitative questions as relevant.

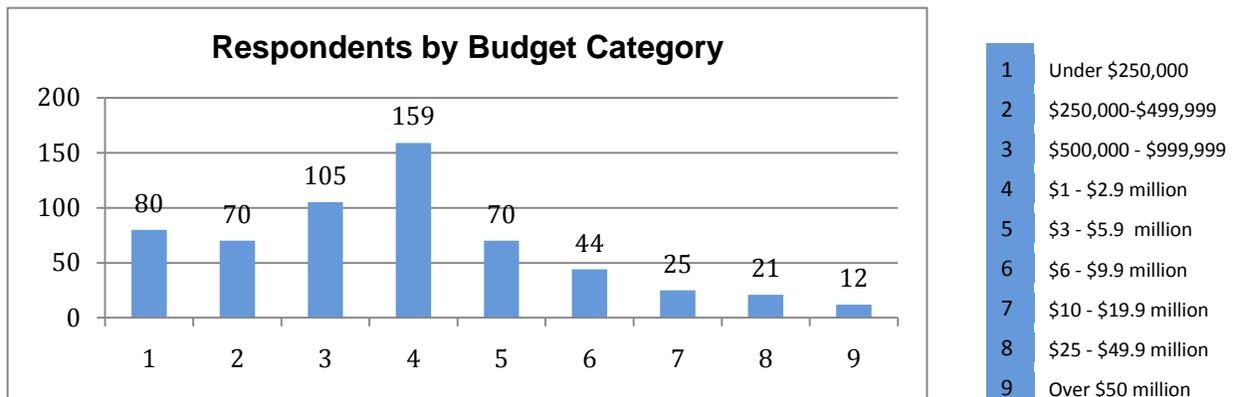
### Key Characteristics

Geographic Breakdown (# 3).<sup>10</sup> Almost half of the respondents were evenly split between the Mid Atlantic (26%) and West (23%). Another 20% came from the Midwest, followed by 14% from the South, with the smallest groups from Mid-America (10%) and New England (7%).<sup>11</sup>



Year Founded (# 4). Respondents had longevity; **nearly 85% (500) were over 20 years old.** Only 3% (15) were under five years old at the time of the survey.

Budget (# 7). As shown below, almost 44% of respondents' operating revenues were under \$1 million, and **almost three-quarters (71%) were under \$3 million.**<sup>12</sup>

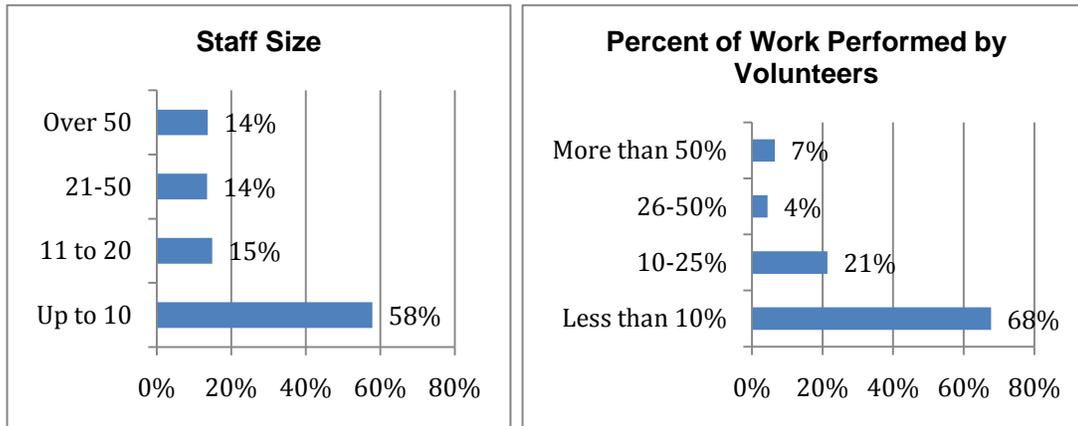


<sup>10</sup> The numbers in parentheses indicate the question numbers in the original survey, which can be found under Appendix A.

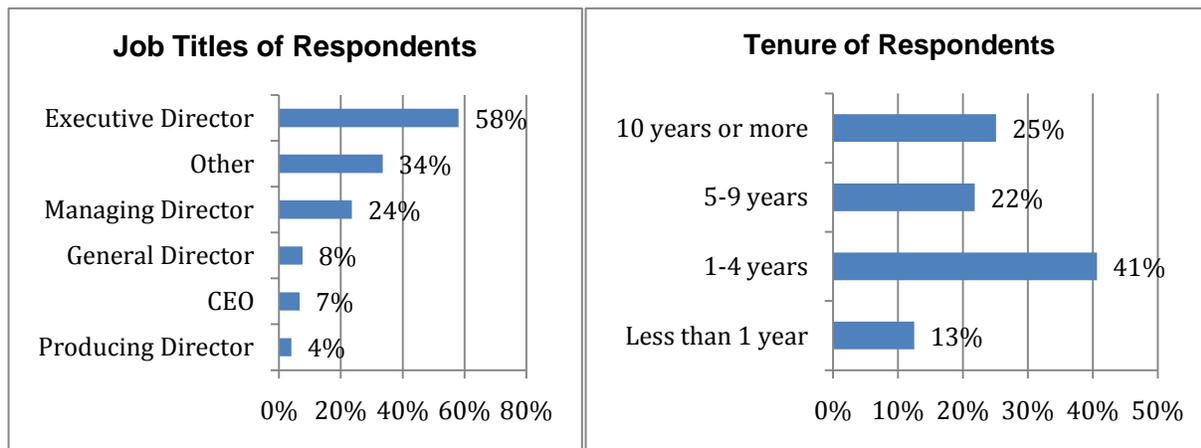
<sup>11</sup> Regions were assigned in line with the NEA's regional arts organizations.

<sup>12</sup> There was no breakdown of earned versus contributed income, or of administrative versus artistic costs.

**Staff Size (# 8).** The **majority of respondents (58%) had 10 or fewer employees.** The remaining 42% was split almost evenly among the other three staff ranges. However, due to the wording of the question, figures may or may not include all artistic staff and/or others on contract.<sup>13</sup> **For most respondents, a low percentage of work was done by volunteers.** However, it is unclear whether these volunteer figures include administrative pro bono help, or also performers. An even **larger majority (71%) had no designated IT staff.**



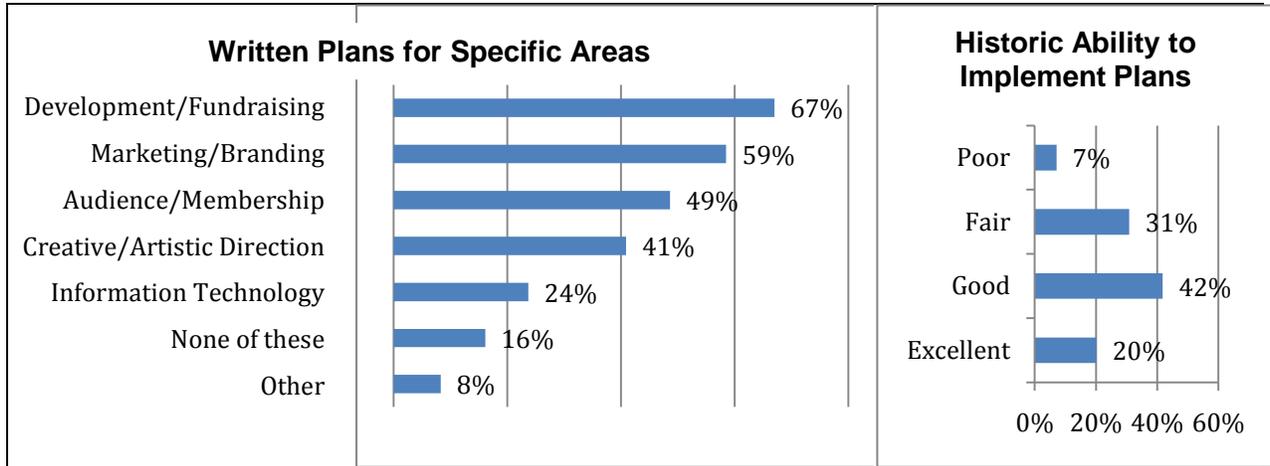
**Leadership of Respondents (# 5 & 6).** **Most surveys were completed by executive directors (58%) and most respondents had four or fewer years in their role.** However, due to the wording of the questions, respondents' prior job experience was unclear; a seasoned 50-year-old ED who just began with the respondent organization would be counted alongside a 30-year-old in their first senior position.



**Planning Habits (# 12-15).** Strategic planning was a common practice among respondents. **80% reported having up-to-date strategic plans, and 60% had completed plans within the past**

<sup>13</sup> It was discovered during the case studies that some organizations included their performers in the question on the NPower survey about staff size while others did not. Therefore, figures about staff size within the cases, in some instances, differed markedly from the survey. This supports our concern about staff size as reflected on the original survey. The percentages and chart shown here, however, display the original survey data alone and have not been changed based on case study staff figures.

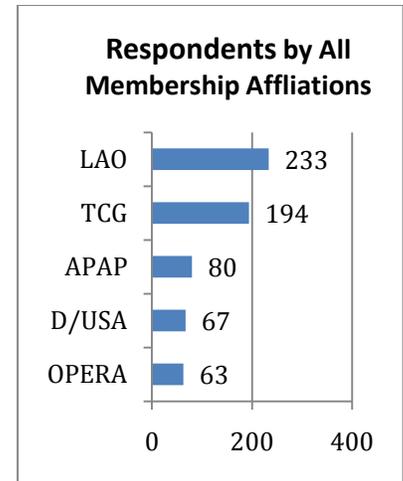
**three years.** Conversely, about 40% had not planned within three years, or at all. As for budgeting to realize these plans, 80% included an economic strategy for developing revenue required to support their plan (# 12). When asked about their interest in having board participation in technological planning, 44% aspired to receive such support and oversight; about a quarter had this already; and another quarter were uninterested in board support (# 15). Not surprisingly, **planning was most common in development (67%) and marketing (59%), both of which drive income, while less than one-quarter had technological plans. Most (62%) rated their historic ability to develop and implement plans as good to excellent.** Planning will be presented in more detail in the Key Themes (see Planning and Decision Making).



Professional Development (# 62-64). **87% of respondents either had no line item in their budgets for professional development or an insufficient one.** Only 12% felt that the amount allotted for professional development in their budgets was satisfactory (# 62). Professional trainings that respondents pursued most often included **fundraising (74% of organizations), marketing (65%), and management (53%). 33% had attended trainings on technology (# 63).** Responses indicated that **85% of organizations always or generally paid a fee to participate in these trainings (# 64).** The issue of professional development will be addressed in greater detail below (see Key Themes, Mellon Proposed Solutions).

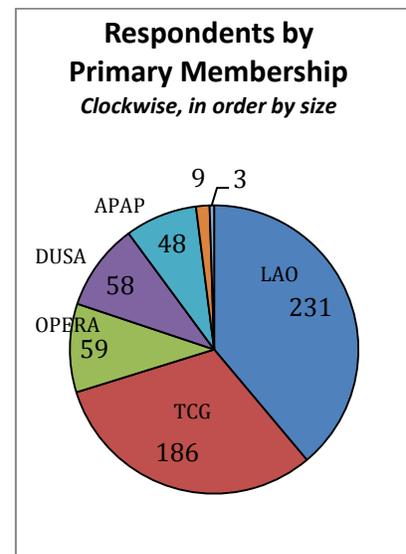
Discipline (# 2). While the overall representativeness of the five disciplines was good, some disciplines were more represented in the survey, and there was some variance in response rates by discipline. As the table and graphics below indicate, **more than two-thirds of the sample (and thus more than two-thirds of its results) represented the experiences and attitudes of orchestras and theater companies.** Dance companies, opera companies and presenters (defined by primary membership, see below) composed far less of the sample. Meanwhile, **opera companies and dance companies were far more likely to respond to the survey than presenters, with theater companies and orchestras falling in between.** The visual depiction of the same information conveys this contrast between response numbers and response rate.

Distribution by Discipline(s)			
Membership Category(s)	Invitations Sent	Total Members Responding	Response Rate
Association of Performing Arts Presenters (APAP)	275	80	29.1%
Theater Communications Group (TCG)	485	194	40.0%
League of American Orchestras (LAO)	545	233	42.8%
Dance/USA (D/USA)	133	67	50.4%
Opera America (OPERA)	110	63	57.3%
Total Membership Affiliations Represented		637	



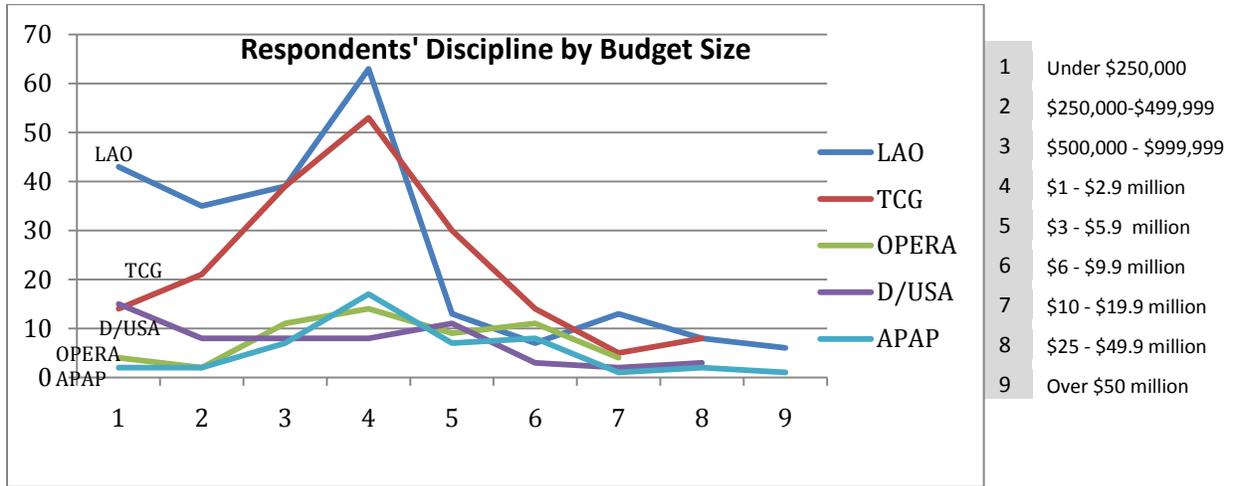
**Primary Membership.** Of these respondents, eight percent (48) indicated membership in more than one of the discipline-based associations. Most respondents with multiple memberships belonged to APAP and one or two other associations, (the most often of which was dance). This presented a discrepancy between the total number of membership affiliations reflected on surveys (637) and the number of unique organizations that responded (594). In order to avoid confounding the analysis where discipline was involved (i.e., counting the same organization more than once) organizations with multiple memberships were assigned a “primary membership” based largely on a determination of their mission. The table and chart below depict each respondent, by primary membership.<sup>14</sup>

Distribution by Primary Membership					
Membership Category(s)	Total Members Responding	Percent of Sample	Primary Membership	Percent	
APAP	80	13.5%	48	8.0%	
TCG	194	30.5%	186	31.1%	
LAO	233	37.5%	231	38.9%	
D/USA	67	7.4%	58	9.8%	
OPERA	63	9.6%	59	9.9%	
None Assigned	-	1.5%	9	1.5%	
Undetermined	-	.5%	3	.5%	
Total	637	100.5%	594		



<sup>14</sup> These 48 organizations were originally reviewed by NPower and the Mellon Foundation and assigned a primary membership, based on mission. Nine could not be determined. Subsequently, changes to these primary membership assignments were made, and 58 rather than 42 are now assigned to Dance/USA, and 48 to Arts Presenters. For example, dance companies and dance-only presenters were assigned to D/USA, while multidisciplinary presenters were assigned to APAP.

**Revenue.** A look at revenue by membership confirms the concentration of responses at budget levels 3 and 4, regardless of discipline, with one exception: dance had the largest proportion at the smallest budget levels and more even distribution across levels 2 to 4.<sup>15</sup>



### Technologies that Might Help Organizations (# 34-47)

Respondents were asked to rate a series of statements about “ways in which organizations in the performing arts might want to use technology,” and they responded according to the following scale:<sup>16</sup>

Aspire:	We are not currently doing this but it is a goal for us.
Some:	We are doing this, but not yet as fully or effectively as we envision.
Yes:	We are doing this to our satisfaction.
N/A:	We have little or no interest in doing this.

According to the graph below, the two ratings of “Some” and “Aspire” might be interpreted as collective goals and areas for improvement—or, where respondents’ greatest technological needs may lie. Using these interpretations, **a high percentage of respondents (50% to 86%) expressed aspirations to improve on all areas of technology listed**, particularly management of donor and audience data.

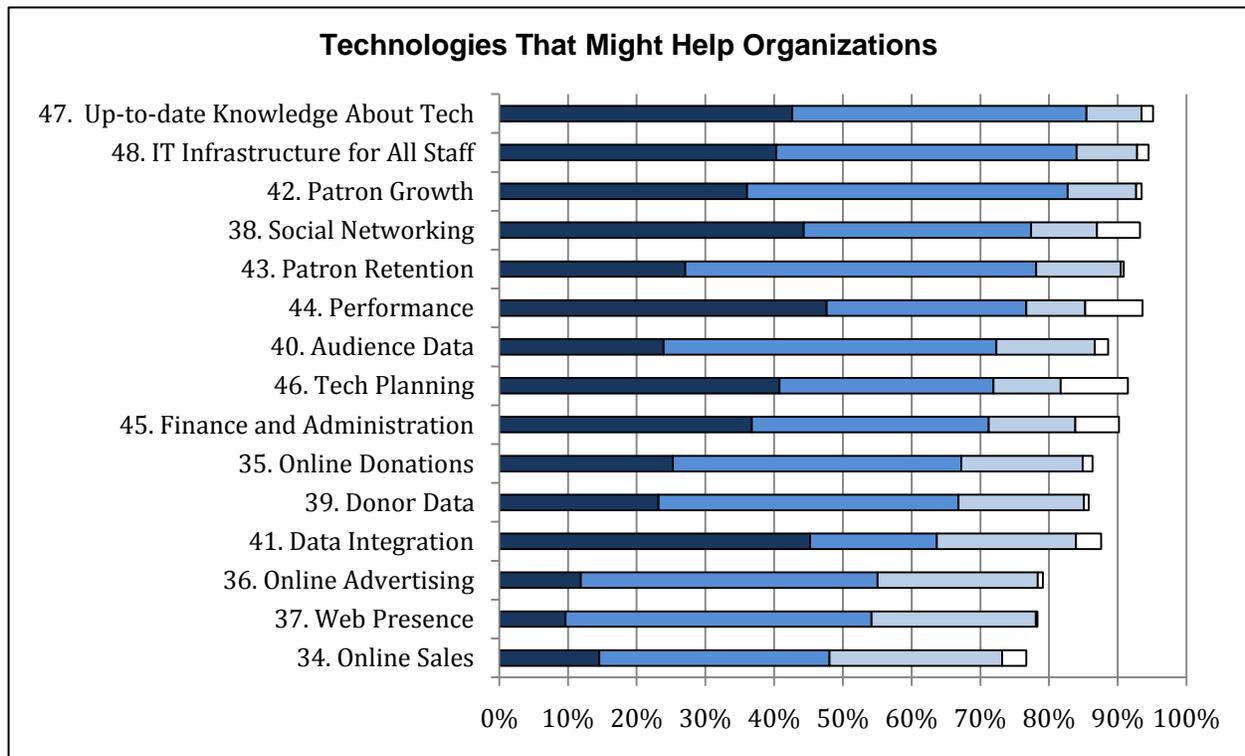
Those that were **cited most frequently as goals or areas for improvements** (meaning that over 80% rated them as either “Some” or “Aspire”) were:

- Innovation, or keeping current with new technology**—regularly seeking to improve how it is used for audiences, donors, funders and staff (# 47, with 86%).
- Needs of Staff**—for those in the organization to have the information technology support

<sup>15</sup> This graph excludes those with no membership and/or budget level indicated (19 respondents).

<sup>16</sup> Note that some of the statements involve complex ideas. Refer to the full wording on the survey instrument in Appendix A.

(hardware, software, training and service) needed to work effectively (# 48, with 84%).  
**Patron Growth**—to use technology to reach and develop new patrons (# 42, with 83%).



Those that were **rated highest for aspirations** (darkest blue) are:

**Data integration**—a unified ticketing and donor development system or separate systems that are easily integrated (# 41).

**Innovation**—the desire to keep current with new technology, as described above (# 47).

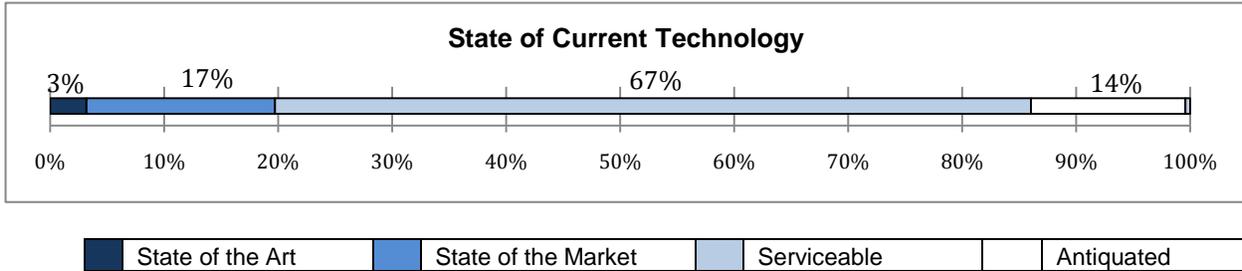
**Social networking**—an online web presence that creates a social networking community for audience members (# 38).<sup>17</sup>

**Performance**—employing state of the art performance-related production technologies (# 44).

<sup>17</sup> As will be suggested below in this report, based on both the qualitative analysis and recent research that was done through case studies and interviews with the Executive Directors, dire need was reported for the integration of data systems. Great progress was also reported in social networking.

## Technology Attitudes and Habits

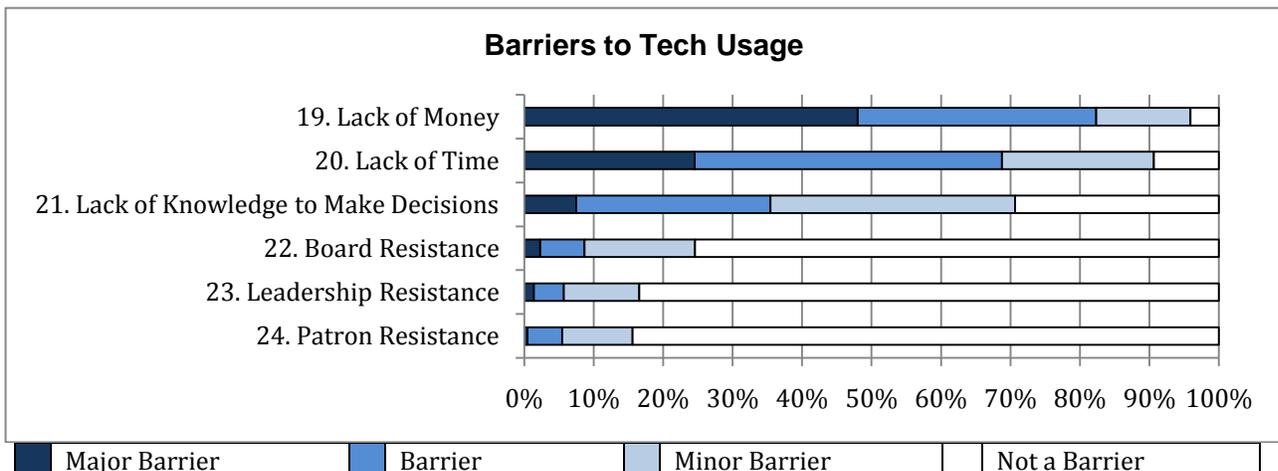
Current Technology (# 29). When asked to describe their current technology, only 20% considered their technology to be either state of the art (3%) or state of the market (17%). Conversely, **a full 80% of organizations considered their technology to be either only “serviceable” or “antiquated.”**



Perceived Barriers to Tech Usage (# 19-24). Respondents were asked if they had experienced any of a series of barriers to effective adoption and use of new information technologies in the past five years. From the questions asked, three barriers emerged.

- Not surprisingly, first on the list was **lack of money**, selected by 83% of the respondents. (Moreover, the lack of funding recurred throughout the data as a barrier regardless of what question was asked.)
- Second, the lack of **time** was also a barrier for 69% of respondents. It is likely that the term —**time**’ was a euphemism for staffing. (This will be explored in greater detail below and in the qualitative questions.)
- Third, **insufficient knowledge to make technological decisions** was also a sizeable barrier, selected by 33% of respondents.

**Stakeholders generally support technology use.** Minimal barriers were resistance from leadership, board or patrons, with a slightly larger resistance from board members.



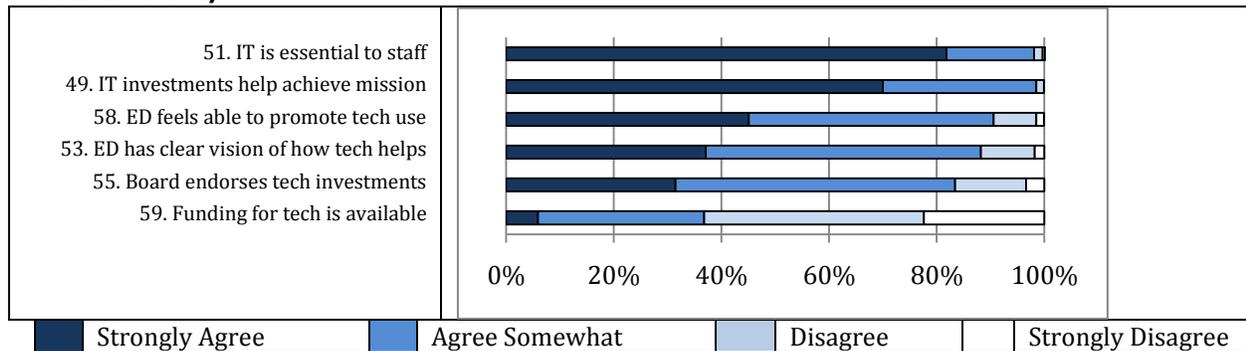
## Views toward Technology within Organizations (# 48-59)

Respondents were asked a series of questions to indicate their views toward technology. Some questions had positive polarity and some had negative polarity. As illustrated below, regardless of the manner in which questions were asked, **respondents expressed quite positive views toward technology use and the opportunities it provided their organizations.**

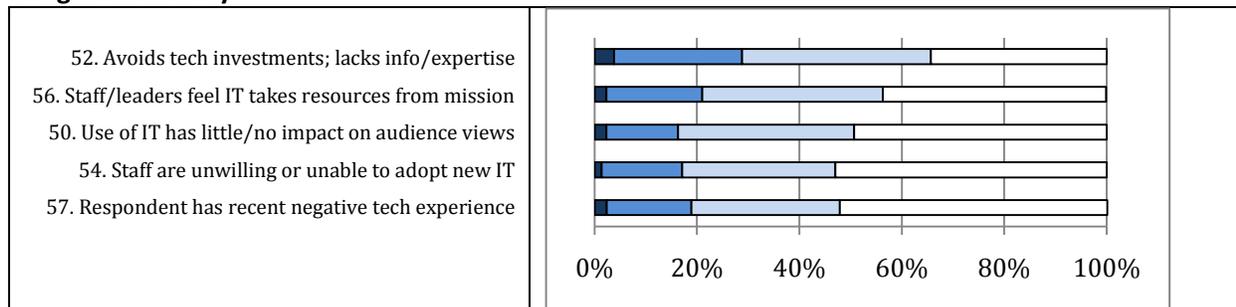
On the positively worded questions, **respondents showed strong agreement that technology can help** achieve their mission; they also felt that EDs have both the confidence in their ability to promote and encourage uses of technology, and a clear vision for how technology can support the vision of the organization. There was one exception: funding, which was the only positively worded question that received low agreement, implying a lack of available funding.

Even on the negatively worded questions, **the vast majority of respondents** shifted their ratings accordingly to **imply their positive experiences with and views toward technology.** They implied that technology resources might support the mission, that staff is willing to adopt new technology, and that tech investments can impact audience views. One question was a slight exception: about one-third of respondents agreed that they **avoid technological investments because they lack information, expertise or clarity necessary to make decisions.**<sup>18</sup>

### Positive Polarity



### Negative Polarity



<sup>18</sup> See Appendix A for the full wording of questions. The survey utilized a common practice, of shifting polarity within a set of questions, to increase the likelihood that answers reflect respondents' true and/or contrasting opinions. However, some questions posed challenges in interpretation, due to their complex wording and/or shifts in polarity. For example, in one question respondents were asked to register their *agreement* that *other stakeholders* felt technology *takes away* resources from the organization's core mission (# 56). Therefore, the data assumes that the respondents were able to discern these differences in polarity and answer accordingly.

## Qualitative Questions

Four of the eight open-ended questions framed a deeper understanding of the tech issues and needs facing respondents. Questions asked about:

- the most pressing tech issues the organization faced at the time of the survey (# 60);
- a significant project undertaken to improve or upgrade some aspect of their technology in the past five years, how successful the project was, and what made those projects succeed or fail (# 31-33); and
- barriers to effective adoption and usage of technology (# 25).

Responses were reviewed carefully for the key themes that were present in each one. A coding system was developed out of the data, and multiple codes assigned to respondents, per response, as necessary to capture the multiple themes that were often present in the data. In addition to frequency of themes, also noted were their intensity and apparent connections to other themes in the data, as well as any apparent variance by budget size. A total of 3,356 codes were assigned to these responses.

## Key Themes

The major themes that emerged from these qualitative questions are outlined below. They are followed by charts that aid in understanding the recurrence of these themes among questions (the colors to the right correspond with the charts).<sup>19</sup> In subsequent sections of the report, these themes are revisited in greater detail, through both quantitative and qualitative data.

## Key Themes

Four of the eight open-ended questions framed a deeper understanding of the tech issues and needs facing respondents. Major themes that emerged from this close analysis of the qualitative responses are outlined below. They are followed by visuals that aid in understanding the recurrence of these themes among questions (the colors to the right correspond with the visuals).<sup>20</sup>

<p><b>Funding.</b> Respondents reiterated the sheer need for funds for technology in general or for specific tech projects, and the degree to which their lack of resources earmarked for technology was make-or-break to their success in using it.</p>	
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<p><b>Integration of Data Systems.</b> Respondents registered their strong desire to purchase systems that would integrate their data, most often for ticketing and donor development. Occasionally mentioned were accounting, customer relationship management (CRM), general databases, and web interactions (e-blasts) with audiences. Some desired to integrate two or more systems to avoid duplicating their efforts in data entry and reporting.</p>	
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<p><b>Staffing (or Time) and Leadership.</b> Respondents stressed the human resources that were needed</p>	
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<sup>19</sup> While the graphics presented here frame a picture of the qualitative findings, they are not meant to imply statistically significant findings, but more so an overview of the strong recurrence of issues.

<sup>20</sup> While the graphics presented here frame a picture of the qualitative findings, they are not meant to imply statistically significant findings, but more so an overview of the strong recurrence of issues.

<p><b>to learn and use technology, often emphasizing the lack of available staff, given competing priorities for their time.</b> Time was considered a euphemism for staffing, which could include internal, contracted, and pro bono human resources, as well as related data about their attitudes, interactions, and leadership.</p>	
<p><u>Up-to-Date Knowledge.</u> <b>Respondents desired more expertise and knowledge, so they could use technology to its fullest potential.</b> This included the process of researching and choosing technology. They strongly desired to <i>keep current</i> on technology trends in order to know how systems were changing. They desired <i>training</i>, so staff would know how to use the technology they purchased.</p>	
<p><u>Upgrading Hardware and Other Technology.</u> <b>Respondents regularly had to replace hardware and software;</b> the need to purchase was never-ending and hard to pay for.</p>	
<p><u>Upgrading Software.</u> <b>Respondents strongly desired to install and maintain up-to-date versions of software systems and products.</b> Sometimes responses were merely a long list of a wide range of software such as ticketing, box office, donor, operating systems, accounting, and database programs. Respondents often named the type but not a specific brand. The need for software was interrelated with the need for the knowledge to use it.</p>	
<p><u>Web and Social Media.</u> <b>Respondents mentioned their goal of updating websites, with little specificity about how or to what end.</b> Some wished to update sites themselves and others wanted more ease updating sites, even if they worked with consultants to do so. Social media was rarely mentioned and tended to imply a general interest in usage rather than a strategy or success, though there were occasional references to blogs, podcasts and YouTube (note again that this survey was collected in 2008).</p>	
<p><u>Smaller Categories.</u> Issues that appeared in 7% or fewer of the responses were: <b>planning and decision making</b> (often reflections on how lack of planning in tech projects hindered outcomes) and other (comments on miscellaneous areas, most often art production).</p>	

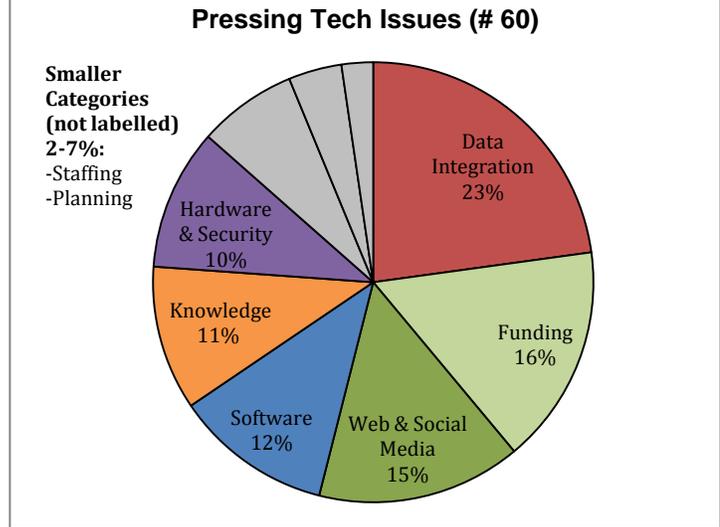
**The charts below illustrate how these key themes appeared in each open-ended question.<sup>21</sup>** Together, these charts reveal interesting consistencies and contrasts within the data. The visuals and analysis look first at the **urgency respondents felt related to their technology use** – the breadth of pressing issues that needed to be addressed at the time of the survey. It then moves to the **tech projects that they had in fact already undertaken**, presumably because they felt comfortable in completing these projects either themselves or with outside help. Then, a closer examination reveals more about what worked or did not work as projects were implemented; it shows an interesting **convergence among a few of the themes that appeared to make or break success**. Then, a look at respondents’ **ongoing barriers to adopting and using technology within their organizations** shows the internal circumstances that hindered their success, regardless of the project undertaken. Finally, a wrap-up shows the **convergence across all of the themes**.

<sup>21</sup> Pie charts are used because they depict 100% of the key themes that were present in each question. They are divided into parts (or slices) to also show the relationships of each key theme to both the whole (all of the responses) and to the other parts (prevalent responses within each question). Summaries for each question can be found in Appendix D.

### Pressing Tech Issues (# 60)

When asked about the most pressing technological issues at the time of the survey, responses revealed the relative proportions of key themes as discussed above. Responses began to hint at how funding for and knowledge of technology were crucial in solving their tech issues.

The most prevalent need was for workable **systems to integrate data**, mainly for ticketing and donors. Frequently mentioned was the need to stay up to date with a range of other **software applications** along with their **websites**; less frequently mentioned was learning to use **social media**. Finally, respondents lamented their need for **greater knowledge** of how to make the best use of software once it was installed.



Two trends did emerge. **Across these different areas, respondents often expressed their tech needs in one of two ways:**

- 1) **As a long list of desired improvements, often lacking specificity, that were interconnected in the same sentence.** For example, one wrote, “Networking, fully functional computers and consistent operating platforms, data storage and access, website maintenance, communications technology.”
- 2) **As a solution-oriented statement.** For example, another wrote, “More strategic affinity marketing using technological tools and trends, [and to] elevate on-line contribution tools to become more efficient and user friendly.”

In essence, some organizations seemed overwhelmed about their technological weaknesses, while others were more confident about how improvements could be accomplished. This dichotomy appeared throughout responses, especially those that emphasized data management.

Another thread through responses was a level of anxiety about technological needs, especially **staying current and making the right choices for technological expenditures**. The worry about staying abreast of technological developments appeared over and over. Respondents hesitated to make large investments in technology if the products they bought were likely to quickly become obsolete. Many also reported that the products they owned were aging, but they did not have the funds to replace them, nor did they know what to buy. Respondents were unsure of the right product for their needs and feared blowing their budget on the wrong technology.

Regardless of the type of tech issues, **funding and staffing were emphasized at all budgetary levels**, and were often woven into other requests. Respondents recognized that without these two key resources they would not be successful in addressing their tech issues. Regarding funding, respondents needed larger budgets not only to buy products, but to attain the skill set (whether through training, outside consulting, or time to learn independently) to adopt new technology—or as one wrote, “finding the funding and time to keep up with technological advancements.”

### Tech Projects Undertaken (# 31)

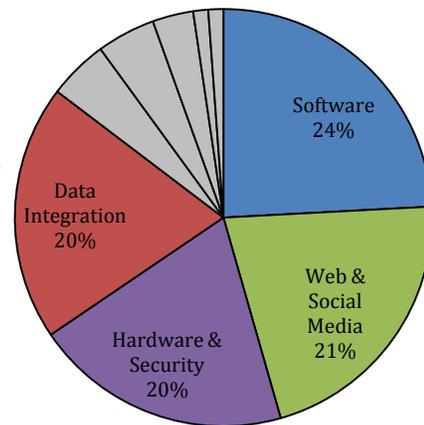
Because the question asked about a specific “project” that had already been undertaken, the responses shifted to more tangible products and goals, often around the installation or use of a particular software project or system.

Projects ranged from large and ambitious to small and commonplace, from completing major **software** installations, to installing regular upgrades, to installing new **hardware**. Projects and efforts to **integrate data systems** were so commonplace, that they are presented separately. Mentions of **web upgrades** were just as frequent, but much less specific.

### Tech Projects Undertaken (# 31)

#### Smaller Categories (not labelled)

- 1-5%:  
-Funding  
-Other  
-Staffing  
-Planning  
-Knowledge

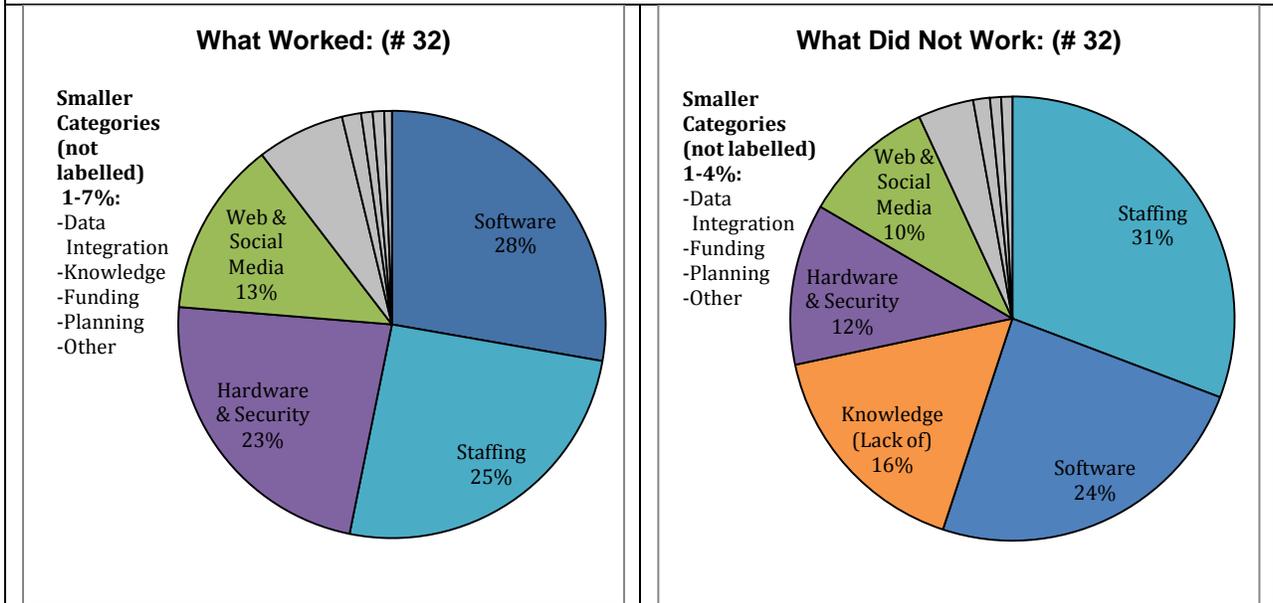


Some considered a tech “project” to be something as simple as using Google Calendar. Projects frequently revolved around **software** (218, 38 of which concerned Tessitura), **hardware** (103), and **websites** (93); these were generally described in vague terms such as “upgrade,” “redesign,” and “new.” Software specifics included ticketing, donor, and financial systems; hardware was most often computers and servers. A minority of respondents’ tech projects included building networks (30), creating tech plans (7), and installing phone systems (2), among various other items.

**What Worked and What Did Not Work (# 32)<sup>22</sup>**

**In completing these projects listed in # 31, there was a close divide between the factors that contributed to their success and those that were blamed for their failure, particularly issues related to staffing and software. When projects failed, a striking factor emerged: shortfalls in knowledge, as shown on the right.**

Here, the element of **staffing** could make or break a project’s success, depending on whether or not staff was enthusiastic, and working as a team (on the left), or whether they were resistant to, or insufficient for, the project (on the right). Again, respondents who failed at projects lamented the lack of know-how, due to either the shortfalls of their staff, or of the consultant/vendors they chose to work with.



**Respondents who described successful projects (39) were generally vague about what worked.** Comments tended to refer to the installation of software and hardware rather than the usage of the program or equipment. Many respondents merely said that projects —worked well,” with little or no description of how. However, this lack of detail may not imply lack of satisfaction. Positive comments that were more specific conveyed the ways in which staff leadership could drive a project’s success, including collaboration and teamwork across departments, and the role of vendors who were knowledgeable or who led projects. For a few respondents, active planning and budgeting played a role.

**Conversely, respondents who described unsuccessful (114) or mixed projects (196) were generally specific and frustrated.** As will be presented below, this specificity and frustration related strongly to the human element, including the lack of sufficient internal or dedicated IT **staff**, resistance to change, the lack of **knowledge** on the part of staff, and competing priorities for time. Also prevalent were problems with vendors, who overpromised on new products’

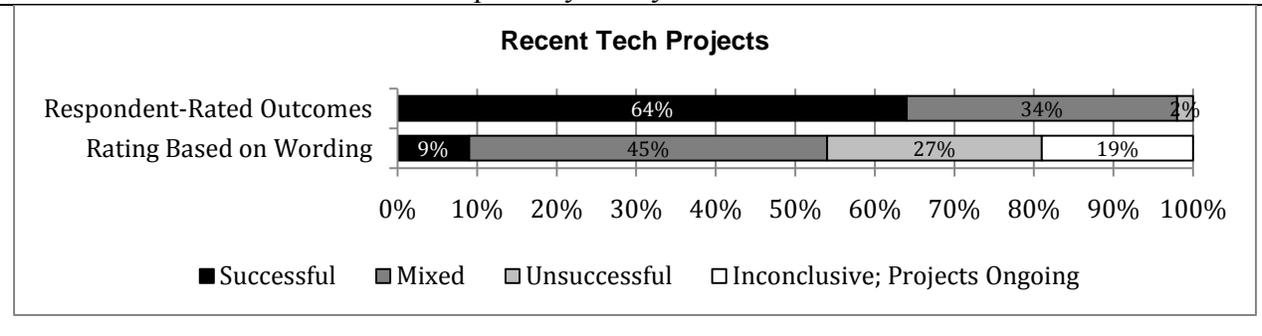
<sup>22</sup> A number (108) of responses left question 32 blank while others (37) described projects that were in progress at the time of the survey and could thus not give definitive answers.

capabilities, under-delivered on services they were to provide, or lacked the knowledge to truly lead in installing these products.

**Tech Projects Undertaken: A Closer Look at Respondents' Success Ratings (# 33)**

**As the responses above about tech projects were reviewed, it became clear that respondents' ratings of the success of their projects did not always match their descriptions of the experience.**

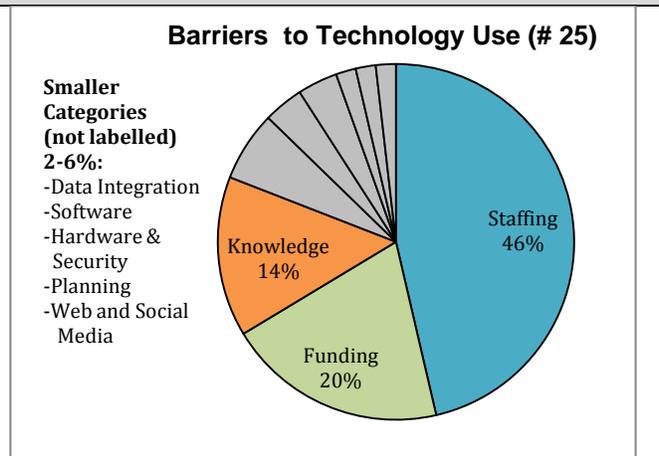
As shown below, respondents rated their experience as "successful", while a majority of these described their experiences as mixed or even negative. To illustrate the inconsistencies, the consultants assigned a new set of ratings based on the descriptions, which are shown below. This allowed for the data to be analyzed based on content, rather than rating, which helped clarify what truly worked through these projects and what did not. This disparity between ratings and comments might be due to the fact that respondents ultimately felt successful if they survived the installation and were able to at least partially use systems.



**Barriers to Technology Use (# 25, with 72 respondents)**

**Interestingly, when asked about barriers to adopting and using technology effectively, responses focused largely on the lack of human resources and funding. This supports the notion, as presented above, that these factors were the means to an end, in their success.**

As shown, the main barriers to usage were shortfalls in **staffing** and **knowledge**--as well as in financial resources, or **funding**. It appears that their perceptions of ongoing barriers to *usage* of technology related more to having the human power and expertise to know what to buy, how to operate it, and troubleshoot problems, as well as the funding to pay for it.



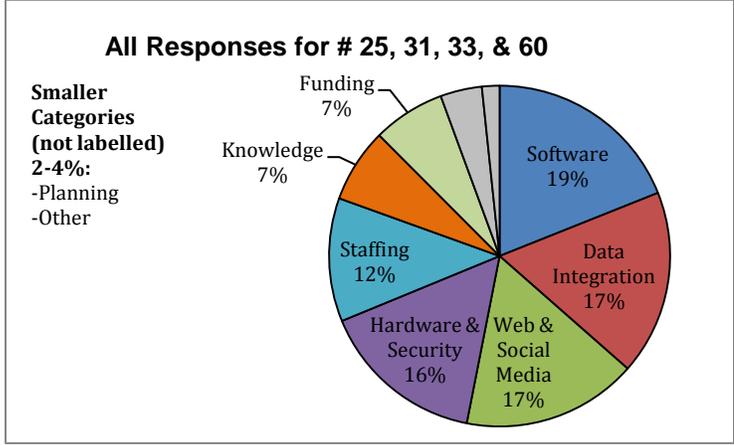
As shown previously in questions 19-24 (see page 16), respondents had already rated their organizations' experience with a series of potential barriers to technology use. Many repeated

these sentiments in their comments in question 25, opting to add emphasis and explanation, particularly in the area of **staffing**. The need for basic resources was often inextricably tied to one another, as indicated by this comment: “Major barriers to adopting new technologies are the time it takes to research and implement new technologies coupled with the need for specific fundraising efforts to acquire the technology.” This respondent was one of many who seemed clear-headed about recognizing their barriers and the complexity of their solutions.

**Composite View of Open-Ended Questions (# 25, 31, 33, 60)**

**A number of tech-related issues emerged as prevalent across all four questions.**

The composite visual to the right shows all responses across the four questions. Over half of the chart relates to **software** applications and usage, either in general or for **integrating data** and upgrading **websites**. About one-fourth relates to having up-to-date **hardware** and sufficient **staff** to do the work. Existing staff were too taxed with other pressing issues.



- Half of the chart above relates to **applications of up-to-date software, in areas that affect respondents’ bottom line** (meaning income, both earned and unearned) **and their connections with audiences**, namely data integration systems for audiences and donors, other software products or generic mentions of staying current on software, and web/social media.<sup>23</sup> Respondents wanted to move forward and address those tech concerns.
- However, these applications would have to be installed and **managed by qualified staff that had both time available and up-to-date knowledge**. Broadly speaking, the barriers that arise were the **human, intellectual, and financial resources** (meaning **staffing, knowledge, and funding**), which would help them make the inevitable upgrades to software and hardware that are needed every few years.

In summary, it appears that arts organizations strongly desired to stay current on their tech-related knowledge and expertise, so that they could use technology effectively. They realized that technology plays an important role in improving their operations, particularly managing their information about audiences and donors. But they did not have the staffing/time and expertise to do so, nor did they have the funds. This hindered the quality of their planning and their decisions.

<sup>23</sup> The use of social media has changed radically since the time of the surveys. Based on the new research conducted, it is believed that a survey administered today that included questions about web and social media would yield very different results. This topic is covered later in this report.

## The Role of the Case Studies: Updating and Expanding Impressions

The qualitative data provided rich content that could be probed through the case studies.

**The eight organizations highlighted in the case studies were selected to reflect a variety of disciplines, budget and staff sizes, and locations.** Among them were one or more that work in theater, ballet, contemporary dance, opera, multidisciplinary presenting, orchestra and hybrid presenter/museum. Budgets ranged from \$950,000 to \$11.5 million (or, from budget categories 3 to 7 on the original survey). The median was \$3.5 million, with only one organization over \$5 million.<sup>24</sup> They ranged in age from 15 to 91 years (average of 44 years, median of 40 years), and senior leadership had been in place ranging from 3-31 years (average of 18 years, median of 17 years). The administrative staff size ranged from two to about 60, but could expand to hundreds if contractors were included. Geographically, they came from the West Coast (2), Midwest (2), New England (2), Mid-Atlantic, and South. Despite these differences, there were commonalities and each organization faced its own technological challenges.

Within the case studies, interviewees had the most experience and insight to share when talking about recent technology efforts, which varied widely in their scope, ambition, and levels of success. As might have been expected from the emphasis in the survey data, **integration of software, particularly donor and ticketing systems**, was a frequently mentioned project, as was the use of **social media**. Less expected was the degree to which interviewees were interested in **enhancing their websites**; however, such enhancements related to what they now viewed as the potential of both their websites and social media to reach and cultivate audiences—*which is likely a dramatic change since the original survey was administered.* (In contrast, within the survey data, social media and Facebook were rarely mentioned.) Given these advancements, and the breakneck speed at which technology is changing, interviewees realized the importance of data management systems in both capturing and tracking information about people. They were specific about their technological goals and plans, and several demonstrated creative and forward-thinking attitudes towards the topic. Still, the success that organizations experienced in their recent technological efforts was strongly tied not only to what they could afford but to the amount of technical knowledge and skill they possessed. And, success was strongly influenced, it appeared, by their **attitude toward technology and the degree of fervor with which they took on tech projects as positive challenges** that would bring them opportunities and save time.

*The remainder of this report, Key Themes, examines these issues in greater detail. Commentary from case studies and qualitative questions provide rich meaning and understanding of the ways in which these issues played out for respondents. Each section contains examples excerpted from the case studies, which were far more substantive than portrayed in this report.<sup>25</sup> Relevant quantitative questions will be reiterated within each issue.*

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<sup>24</sup> Budget projections for respondents for the current year are: \$950,000; \$2,000,000; \$3,000,000; \$3,500,000; \$3,500,000; \$4,500,000; \$5,000,000; and \$11,500,000.

<sup>25</sup> The case studies are available under separate cover, upon request, from Callahan Consulting for the Arts.

## Findings: Key Themes

### Staffing and Leadership

A closer look at the data conveys the ways in which arts organizations were greatly impacted by their human resources—both in the amount of staff as well as their knowledge and training. Most lacked in-house IT staff, relying instead on a mix of contractors and other non-IT employees—which, survey responses revealed, was inadequate for their needs. The IT staff that did exist focused more on infrastructure maintenance than on strategies or data management. Technology vendors received high praise and sharp criticism, as their role was seen as make-or-break to a tech project's success. Even if employees lacked a tech background, a sense of teamwork, determination and/or a problem-solving mentality was sometimes enough to make tech projects succeed. It mattered greatly who was advocating for the implementation of new technology, and whether they were in a position of any power: leaders that were committed to new technology made it easier to realize goals, while resistant leaders could be major barriers. Those on the board or staff who solved tech problems or took on projects were lauded as heroes. As survey responses showed, most staff and leadership in organizations recognized the importance of using technology. However, the lack of sufficient time and manpower to learn and operate new products was a source of frustration.

#### Data Sources

- Case studies show contrasting approaches to how technology is staffed, both internally and through contractors, and where duties seem to fall.
- Qualitative questions reinforce how staffing is perceived as a major need in handling technology.
- Quantitative questions show these trends within the survey data, including who provides day-to-day technological support and how volunteers are used. Attitudinal questions examine the perceptions about the time needed to do tech work, the degree to which staff's tech needs have/have not been met, and the tech use within the organization.
- Interviews with the service organization heads confirm key points about the distribution of staff that have technological responsibilities within member organizations and offer explanations for planning practices and attitudes expressed in the survey.

#### Balancing Staff Shortages with Competing Priorities

Case studies revealed the ways in which technology use was impacted by the level of staffing, as well as their technological knowledge and training. The two organizations that did employ IT staff were generally satisfied with their knowledge level: “We put a lot of energy into [the IT staff's] training, more so than for other departments; we can't afford for them *not* to be well informed,” one explained. However, **most did not have an IT position and relied on other staff or on outside IT contractors to update and maintain technology.** One committed

manager illustrated this expectation: “I’m the IT person. And I have a degree in flute!” Whether internal or contracted, **IT staff primarily focused on infrastructure**, installing upgrades, networking, and the like and was usually not involved in actual data management or broader strategies related to technology use. This left non-IT staff to learn systems in order to retrieve information and set technological strategies.<sup>26</sup> *Representatives in the cases did not see technology responsibilities as a problem, but instead accepted the widespread adaptation of technology by staff at all levels of an organization in order to do their jobs.* Their real concern was the lack of hours in the day and competing priorities to get their jobs done.

Tech Pressing Needs (# 60). In describing pressing tech needs, **of the 140 respondents who cited staffing issues, 85 desired additional time.** Organizations were too busy to perform duties or train others, as one wrote: “IT training and coordination needs more full time professionals than we can now afford without neglecting our core mission.” Another saw a connection of staff shortfalls to tech usage: “We are understaffed, it is difficult to put in the training time to learn how to best and most efficiently use our newly purchased database.” At issue was not just the amount of staff, but also the expertise and funding needed to “recruit competent employees well versed in new technologies and communications,” as one noted.

Tech Barriers (# 25). **Likewise, two thirds of respondents (47) commented that, given other priorities, staff’s size, hours, and technological expertise were inadequate.** Most seemed concerned about having technological expertise readily at hand. This lack of staff that was needed for research, training, and fundraising hindered organizations in acquiring technology as well as maintaining it. As resources dwindled, a few respondents were forced to push technology further down their list of priorities, favoring instead other goals that aligned with their missions. One had technology as a “line item put in the budget for the last 3 years, but each year other pressing needs superseded.” Another offered up the main cause of their problem: “The economy has truly put an end to IT upgrades. It IS important, but cannot be justified when compared to paying a higher per service rate for musicians or getting another ensemble to a school . . .” Another agreed, stating that “filling our mission takes much higher priority.”

Tech Projects (# 31-33). **In recounting technological successes and failures, staffing was the most frequently cited element** (220 responses). What did and didn’t work had everything to do with *who* was involved, whether it was in planning, implementing, maintaining, or advising. Interestingly, there was **a close divide between staff-related factors that hindered or helped projects.** Commonly shortcomings were stated merely as “limited staff,” without elaboration. Some added more emotion: “We desperately needed more IT resources in-house.” Other limitations might be tied to specific expertise to learn and manage everything from hardware to software to html coding. Several added that staff turnover exacerbates the problems of maintaining procedures and systems that become “tax and difficult to maintain,” as does staff’s intermittent use of technology: “The AD, who updates constantly, remains adept at the process. The managing director, who uses the tool more sporadically, forgets procedures.” Relying on volunteers met with anticipated mixed results because “you are not a priority;” one told a story of software that was installed by a volunteer on the wrong drive, and eventually “crashed and disappeared.”

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<sup>26</sup> A service organization head commented on how this trend was changing job descriptions: “We are starting to see titles with ‘and’ at high levels [within organizations, such as a] VP of Programs and New Media.”

*It is important to note that the issue is not merely that staff be increased, but that they be knowledgeable, and possess the acumen to lead and plan, in order to get the technological job done. This idea is addressed more fully in the “Up-to-Date Knowledge” section below.*

### Quantitative Survey Questions

- **91% of respondents felt that lack of time was a barrier to adopting new technology** (# 20). As mentioned above, it is likely that “lack of time” is synonymous with “lack of staff,” those existing being overburdened and having to prioritize their time.
- **Only 14% thought they had sufficient IT support** (# 48). Another 84% either lacked IT support altogether (44%) or felt it was available to only some on staff (41%).

### **Tech Vendors: Polarized Viewpoints**

Through the range of projects described, case studies implied that **tech vendors could make or break their success**. But this point was conveyed with greater detail and emotion on the survey responses.

Tech Projects (# 31-33). **One third of staff-related responses conveyed, with gratitude, that vendors and consultants could contribute to technology projects’ success.**<sup>27</sup> As one stated, “The people we brought on are terrific – helpful, hard working, willing to serve us, and easy to work with.” **Getting good advice was crucial to some in making the right decisions**, as was having an external IT expert to push the project forward. One respondent epitomized both attributes in telling this story:

*Conversion went smoothly because we had a volunteer with experience do our leg work, interview vendors, review contracts, schedule conversion with the least interference and stay on top of tech hours, etc. It would be hard to improve upon the expertise and efficiency that he brought to the table. He happened to be a trustee’s husband and was committed and understood our strengths and weaknesses so we didn’t get oversold or undersold.*

Another summed up a common approach that combines in-kind resources, good advice, and heroes: “We do not have a dedicated staff member to manage our technology, so each new technology project is a learning curve, but we draw on the support of our board and our colleagues to make educated decisions about our technology needs and purchases.”

**Conversely, survey respondents lamented, with frustration and cynicism, the shortfalls of vendors as a major reason for their failures with technological projects.** Many that chose to write about their external expertise described it with words such as “awful,” “frustrating,” and “insufficient.” One exclaimed that a “vendor’s local installer (data converter) did a TERRIBLE job.” Complaints about vendors included lack of follow through after installation, missed deadlines, and services that were promised but not delivered. As one said, “almost all [vendors] have some gaps in their knowledge no matter what they tell you.” A few stressed that

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<sup>27</sup> The terms vendor and consultant appeared to be used interchangeably within the data, and are presented here as such.

consultants' or vendors' lack of arts expertise hindered the services provided. An even greater burden on staff was relying on resources that did not materialize. One said, "Once we found a capable, efficient and reasonably priced independent consultant, we were fine. Prior to that, we were on contract with a small tech company and had one headache after another. We had major issues that ate up a huge amount of time and energy."

### Quantitative Survey Questions

- 58% of respondents received day-to-day tech support from contracted service providers (# 27).
- For expert technological advice, 74% of respondents turned to professional IT consultants and 40% to vendors (# 26).

### **Keys to Success: Leadership, Attitude and Teamwork**

Within the case studies, it became evident that **even if staff did not have a tech background, a sense of teamwork and determination could help technological projects succeed.** Expressing the sentiments of numerous interviews, one ED who made most technological decisions lacked an IT background ("it's absolutely seat of the pants"), but understood that technology was critical to the organization's future and ultimately seemed confident that "you gain the knowledge you need when [technology] has to work right now." Opinions were split as to whether age is a true barrier in technology use; most felt that younger staff members were savvier. But several stressed that age need not be a barrier, as an older interviewee commented: "I'm a realist. It's part of the world that we live in . . . you must be flexible and smart."<sup>28</sup>

Another theme across the case studies was that **it mattered greatly who was advocating for new technology, and whether they were in a position of power. If the leadership and/or board were committed to adopting new technology, the organization found it easier to make its technological goals a reality.** Board involvement helped in several ways. One organization's board member acted as an advisor in technology matters when the organization wrote plans. Another raved about a board member with a technological background who, during a lengthy conversion to Tessitura, "set the agendas and attended all the meetings...[and] worked closely with staff when necessary." That same board member acted as an ambassador to the board for the program; he could explain . . . what was happening, why it was taking so long, where the issues were." (Refer to the Case Study 5 sidebar later in this report.) A third case study organization was increasingly accessing board assistance through a marketing committee that's made up of very knowledgeable tech folks."

Tech Projects (# 31-33). **Survey respondents agreed that leadership could drive a project's success. When this was effective, it was due to collaboration across departments, enthusiasm among those who wanted to see technology projects succeed, or the efforts of staff to troubleshoot effectively.** Having a "project champion" could make or break a project. As one said, "I wish it hadn't been me carrying the burden of learning it all and implementing it

<sup>28</sup> Service organization heads felt that, by and large, what may appear as a lack of interest in or knowledge of technology on the part of EDs is more likely being overwhelmed by the plethora of priorities they face in running their organizations. The only age-related disparity they sensed in the use of technology was in social media.

all . . . but subsequently I was able and still am able to troubleshoot effectively for many problems, a hidden benefit and cost savings to my organization.” When staff could use technology it was acknowledged with gratitude and relief: “The learning curve is high for us here. Thank heavens our business manager knows how it works. But it needs to be easier for the more casual/infrequent user.”

Just as important to case study respondents was a sense of **teamwork for implementing wholesale changes in technology**, which meant “getting the staff involved” and having representation from each department.<sup>29</sup> As one said, “the cross functional collaboration between each of our administrative team has been exceptional.” Another gave a specific example: “our staff has been relentless in communicating issues encountered with the new box office software and creative in making it serve [our] needs.” Board or technological task forces were mentioned as an occasional resource. Even so, there still seemed to be a need to **have an available person responsible for the project or upgrade after the initial installation was completed**; this was mentioned repeatedly regarding software or web upgrades: “the approach works well but it still requires an employee dedicated to keeping content current.”

### **Staff-Related Barriers to Progress**

**Case studies suggested that if leaders were resistant or disinterested in adopting new technology, they became a major barrier in the process, and possibly to the organization overall.** The fear of new technology could make any improvement efforts a constant struggle. Some cases reported on the survey or during the interview that they had no interest in involving the board of directors in technological planning, such as one who said, “I think we’re probably better off learning the information within the staff and then bringing it forward as we’re trying to get the [board’s] response,” and another who agreed, “ultimately our decision-making and needs are best held in-house.”

**Tech Barriers (# 60).** A few respondents (17) reported **leaders who were inconsistent, insufficient or disinterested as a barrier towards adopting technology.** Upheaval in technology plans can result from shifts within the board or staff, when “Because of turnover, many decisions regarding technology are not tied to an overall strategy.” **Respondents who sensed staff resistance were specific and frustrated**, such as one who fired a particularly resistant marketing director. Others described “Luddites” on staff who were comfortable with old systems and reluctant to implement and learn new ones.

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<sup>29</sup> An interesting parallel came from # 5 and # 72, which requested that respondents list staff members, if any, who helped them fill out the survey. Most (74%) were indeed at the level of ED, general manager or CEO. Of the 121 who answered this question, half (61) listed at least two other people who helped inform their answers; some listed between three and ten. Most were senior staff members. Marketing, development, and finance staff were the most frequently consulted (52 respondents). About a third sought help from miscellaneous senior staff, such as general managers, comptrollers, special projects directors, and office managers. Only a few (16) sought input from artistic staff, including artistic directors and production managers. Some listed IT staff (28) or technical or operations managers (8). *It is important to note that very few IT or technical staff were mentioned by companies with budgets of less than \$3 million. The majority who listed IT staff were companies of \$10 million annually or more. Smaller companies who mentioned IT staff were more likely to be referring to volunteers or staff members whose jobs included IT duties.*

Tech Projects (# 31-33). Here, resistance again emerged as a less frequent yet intense problem. One reason for the failure of projects was the **avoidance of change from staff that did not want to adapt to new software**, and would not or could not take the time to learn systems. As one said, “Adoption [to the project] and use by staff was fair. Some utilize the features, many do not want to try something new.”

### Quantitative Survey Questions<sup>30</sup>

**Despite their reservations above, most survey respondents expressed positive attitudes towards technology on the part of staff and leadership.** Survey data indicated only minimal resistance or disinterest towards technology, when compared to their concerns about lack of time and support.

- 83% implied that their **organization’s staff members were willing or able to adapt to new technology** (# 54).
- The vast majority (91%) felt that **they, as leaders, were confident in their ability to promote and encourage appropriate uses of technology** (# 58). Note that the wording of the question was “**promote and encourage**,” rather than “**use**.”
- Most (88%) agreed that their **executive leadership had a clear vision for how technology supported the organization** and advanced its missions (# 53).
- 79% of respondents felt that the organization’s leadership did not see technological investments as a detraction from core mission (# 56).
- 83% agreed that their **board endorsed investments in new technology** (# 55).
- When asked about barriers to technology use, **over three quarters did not sense resistance from the board** (76%) nor from other leadership (84%) (# 22 and 23).

#### **Case Study 4. Staff Determination Solves Technology Problems**

Even without dedicated IT staff, one organization was able to maintain a nearly state-of-the-market level of technological fluency because its leadership had adopted a come-hell-or-high-water attitude towards using technology. The executive director, who had no formal training in technology, was determined to stay informed: “Dealing with our computer systems is about 5% of what I do, and I do it because I can and somebody has to . . . I feel like now it’s part of my job to do it.” The ED’s secret of success was having confidence that staff can “**gain the knowledge [needed when technology] has to work right now.**” This attitude allowed the organization to function despite its radical expansion in programming and volunteers over the summer season, and problems ranging from wireless technology to aging hardware.

While this organization had issues with data systems for ticketing and donors that did not integrate with each other, the ED had come up with a solution involving writing “**some little macros**” and spending a “**day of fiddling**” with the different programs. The ED summed up the organization’s attitude toward technology by saying, “**By my nature, I’m going to put in whatever I need to put in to have a [functioning organization].**” The ED’s determination indicated that in some cases a technological

<sup>30</sup> For consistency and ease in presentation within this report, questions with negative polarity and/or that used Likert scales are presented here in simpler form with positive polarity. For original wording, refer to Appendix A.

background was less important than a willingness to learn: “I think here things actually work well in the end . . . [because] there’s this ‘just make it work’ kind of sensibility.”

### **Case Study 1. Staff Resistance Hinders Technology Use**

A small organization's staffing problems had a huge impact on its use of technology. Its technology efforts were led by an "accidental techie," meaning someone on staff that had no formal background in technology. But the lack of technological understanding of the rest of the staff compelled the interviewee to act. Faced with lack of knowledge, resistance from others, and even a reticence on the part of leadership to pay for technology, the interviewee struggled to implement even the smallest projects. Six years ago, "When I started, they had a single [commercial email] account that everyone shared," the interviewee reported. "The receptionist would print out the emails and pass them out . . . This is sort of how I ended up doing IT." In addition to leading the switch to professional email addresses, the interviewee had to fight the organization's over-cautious leader at every turn to accomplish goals such as backing up computers, buying a server, and justifying an investment in Google AdWords. "Mostly the [leader] says, 'If you want this thing, you need to pay for it.'"

Even when new technology was obtained, the staff's lack of interest and training hindered its installation. Because the head of the box office refused to learn the ticketing software to its fullest potential, the organization had to deal with three non-integrated systems. They had installed a patch to allow the three systems to work together, but "when it did not work smoothly from the get-go it was abandoned." Although the interviewee had some success in pushing through changes, it was clear that without the support of leadership and teamwork, the already-challenging work of keeping up with technology became all the more difficult. "When you have a small staff and you're trying to change something, you really need everyone on board to make it work," the interviewee said.

## Up-To-Date Knowledge

**Survey respondents and case studies stressed both the need for increased technological knowledge and the ways in which barriers to information and expertise could deter tech usage and progress. Respondents wanted to make effective technological decisions and purchases but lacked the time and expertise to conduct the necessary research. The fact, supported by survey responses, that over half of organizations had no budget for technology training and the vast majority felt lack of knowledge was a major barrier, showed the difficulty of keeping up with constantly changing technological advancements.**

### Sources

- Case studies explore how knowledge affected the outcome of tech projects that were undertaken, as well as the ways in which organizations sought and obtained knowledge.
- Qualitative questions illustrate how the presence or absence of tech knowledge dramatically affected project outcomes and perceptions of technology as a barrier.
- Quantitative questions show data trends about budgeting for technological training, perceptions of knowledge levels, and sources of tech advice and support.

### Knowledge and Training: For Tech Research, Usage and Investments

Throughout the data, many survey respondents felt that they lacked adequate training and knowledge in adopting new technology. **Case studies provided greater insight into how staff's own knowledge, and barriers to obtaining it, can affect technology usage.** One described the ways in which the disparity in staff's knowledge level plays out on a daily basis: –some staff is more savvy and able than others. In some cases it's a level of understanding and of willingness. For some, if the computer does anything they haven't seen it do before, they call me and panic. They close their email and think their computer crashed. Others are much more savvy and independent.” Willingness to learn was a problem at another organization where –changes can be tough when it comes down to [staff's knowledge and attitude that it was] easier the [old] way.” **Even organizations with the budget and inclination to train staff still considered lack of knowledge a barrier in learning new technology, particularly about software.**

While lack of funding was cited consistently as a reason why organizations had not advanced technologically, case studies conveyed the sense that funding alone would not solve the tech problems within organizations. Based on personal experience, one interviewee strongly encouraged funders to require a commitment to training, within their tech-related grants: –It needs to be clear that staff knowledge is an essential part of the project . . . Don't just give money to buy this fancy equipment without requiring [organizations] to learn how to use it.”

Tech Needs (# 60). While 140 respondents desired additional, or improvements in, IT staffing, organizations **were most concerned about training their staff to use new technology (49)**, a trend repeated throughout the qualitative data. Training was key to —keeping the staff current and at the same level of proficiency,” one wrote. **Guidance was needed to solve dilemmas**

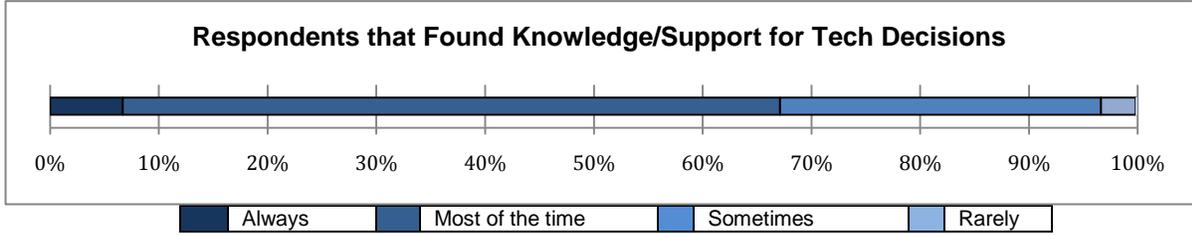
**about which technology to buy, how much to buy, and how much money to invest in this technology.** As one wrote, “New technologies for marketing and online presence are expensive and difficult to figure out what to choose . . . it’s hard to know if we would be getting it right for our organization.” Another wrote, “Technology changes fast . . . There may be programs available, but costs are prohibitive and/or we don’t have time to learn about the specific pros/cons for our organization.” Some were more comfortable about the rate of their technological advancement than others. One wrote, “Our audience is technology savvy so it is clear that our technology investments, especially online, are helping us to retain and build our constituents. We are challenged in our ability to keep our online presence vibrant, connected and relevant given the immediacy of the medium.” Concerns frequently circled back to funding as the bottom line: “Money is the big issue. We know what we want and need, we just don’t have the financial resources.”

Tech Barriers (# 25). Even after the majority of respondents (71%) indicated that insufficient knowledge was a barrier to their decision making (# 21), a few (11) opted to repeat this point in # 25. As one reported, “[The] greatest issue was finding the right answer.”

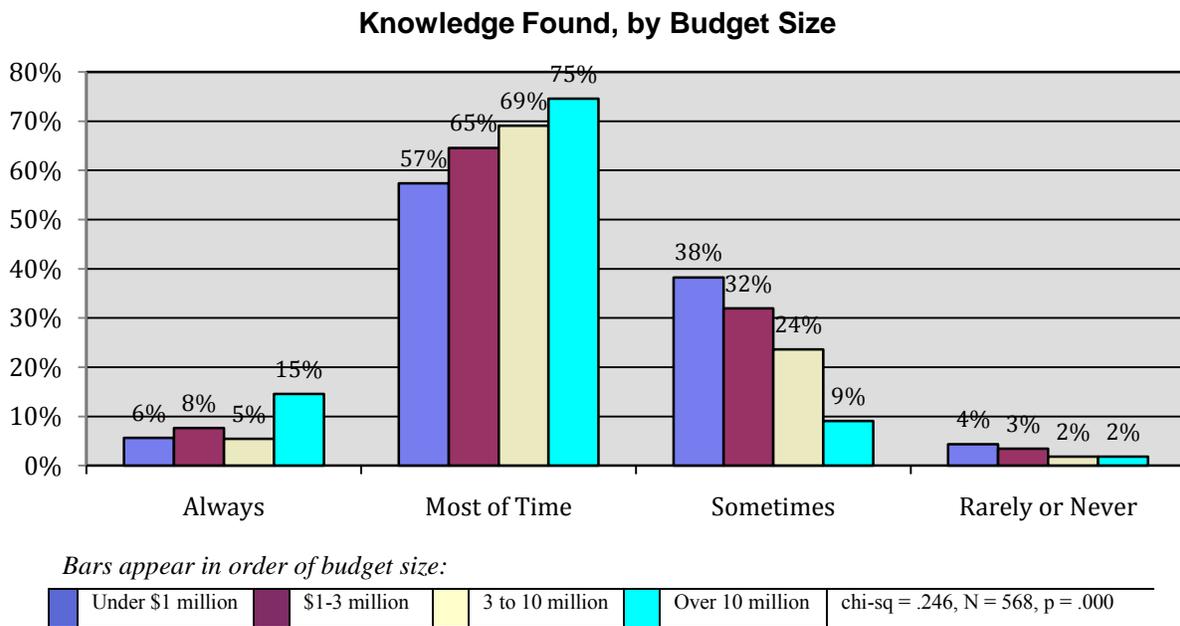
Tech Projects (# 31-33). **Most shortcomings in knowledge surfaced in organizations that attempted to install software, when it became evident that staff lacked the ability and/or training to implement these new systems or web designs.** Capabilities of new software more than surpassed the training that was typically provided, leaving respondents with expensive programs they were not fully or effectively using. Such training was “probably the most difficult obstacle to overcome,” said one. Lack of internal technological expertise to “drive and manage the process” can leave organizations with “total reliance on a very busy outside vendor.” **Those who specifically referenced problems with planning or research tended to refer to software-related projects.** Because these projects had not been well-thought out, respondents found themselves playing catch-up to make up for their lack of preparation; as one described: “w need to be proactive in planning for our technology needs, not reactive.” Others mentioned that more research should have been done at the senior staff level “prior to purchasing,” because, as one said, “We have since discovered that there are better programs and options available to us.” (Refer to Key Themes, Planning and Decision Making.)

### Quantitative Survey Questions

- **The vast majority of organizations (91%) felt that insufficient knowledge was a barrier in making technology decisions,** and within that almost half (44%) considered this a major barrier (# 21).
- **Findings regarding technological advice appear to be inconsistent.** While the chart below shows that 67% of organizations said that they tend to find the knowledge or support needed for tech decisions (# 28), this belief was somewhat at odds with other survey statistics, which indicated that lack of knowledge was one of the biggest obstacles to adopting new technology (as well as with the myriad of qualitative responses that revealed how often tech projects failed due to lack of knowledge). Perhaps organizations eventually found support when they needed it, but they had to go outside the organization or to non-IT staff.

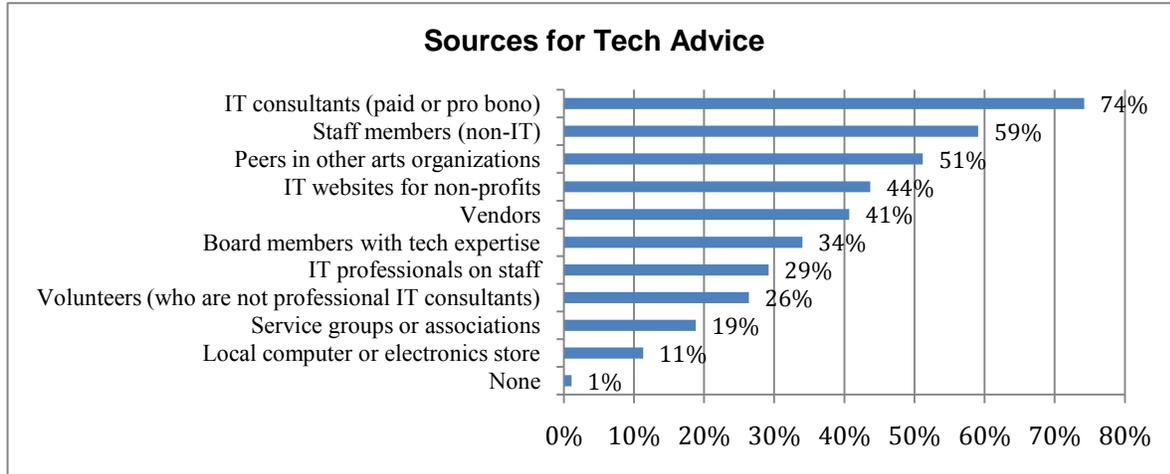


This raised a question as to whether there was any variance in tech knowledge by budget size. A cross-tabulation shows that 90% of respondents with budgets larger than \$10 million always, or mostly, found technology advice when compared to 63% of those with budgets under \$1 million and 73% of those with budgets at the \$1-3 million level.



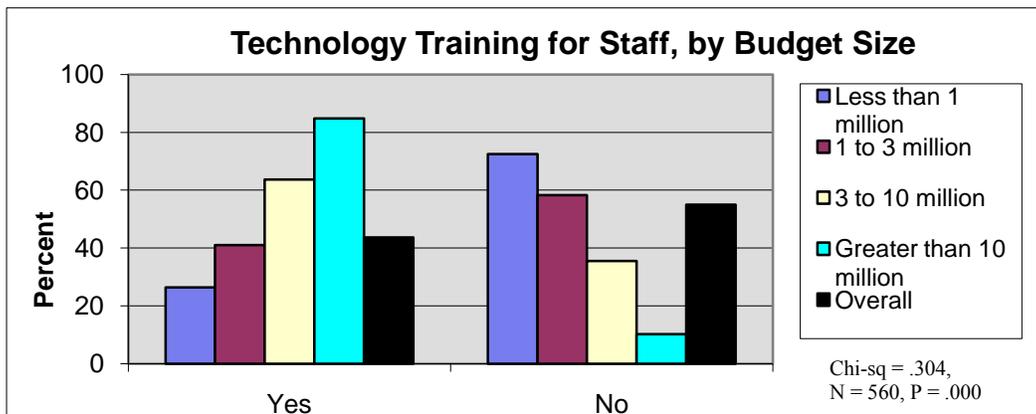
As shown in the chart below:

- **Fewer than one third (29%) of respondents had IT staff available in-house to advise them with technology (# 26).**
- **Most organizations sought advice from third-party experts, including IT consultants (74%), or from non-IT staff members (59%), as well as peers in other arts organizations (51%). Other sources used with less frequency are also listed. Respondents selected an average of between three and four sources each (# 26).**



As shown in the chart below:

- **Over half of all organizations (55%) did not provide technology training for their staff in their annual budget (# 17).** This statistic echoed the sentiment expressed by several respondents—that receiving funds for new equipment did not guarantee that training would also be provided.
- **However, the incidence of technological training was higher at higher budget levels.** In a cross tabulation of tech training (# 17) by budget size, it was clear that organizations with budgets over \$10 million provided professional development in technology with greater frequency. In fact, those with budgets under \$3 million rarely budgeted for technological training.



*Bars appear in order of budget size.*

### **Case Study 5. The Impact of Leadership and Knowledge at the Staff and Board Level**

The advantage of having technology-supportive leaders at the board level was illustrated by this mid-sized organization's quest to mesh donor and ticketing data. Staff raved about a board member who had previously worked in the technology field and helped with the preliminary research, decision-making, and installation of the software. "[The] twelve-month process . . . went relatively smoothly" because he "worked closely with staff when necessary," and was also instrumental in "translating the tech language to understandable language for the staff." His technological knowledge allowed the staff to delegate tasks to him without feeling overwhelmed by the installation.

However, the value of this leadership went beyond the staff and project to the board itself. He also acted as an "ambassador . . . he could explain to the rest of the board what was happening, why it was taking so long, where the issues were." Having this liaison between the board and the staff prevented miscommunication and frustration. Thanks to the board member's assistance, the organization enjoyed a smoother transition to the new product than many other organizations.

## Upgrading Software, Hardware and Other Technology

**Survey respondents discussed the constant struggle to upgrade their technological systems—especially software, but also hardware and security programs. The difficulty of acquiring funds to accomplish these goals was a major barrier for many on both the survey and in the case study interviews. Particularly on the survey, it became clear that only about half of organizations had a budget line item to update their technology more often than every five years, and most did not keep up-to-date on their technology.**

### Sources

- Case studies emphasize the financial difficulty of constantly updating technology and highlight some of the choices organizations had to make about how to spend their budgets.
- Qualitative survey questions show the frequency with which organizations updated their software and hardware, as well as some of their goals and difficulties in doing so.
- Quantitative survey questions show respondents' concerns about finding technology funding and keeping up-to-date on their software and hardware, as well as the state of their current technology.

### A Constant Cry for Upgrades and the Funding to Support Them

Throughout the **qualitative and quantitative data respondents reiterated the need to update software, hardware, and security systems; however, comments were not heavily nuanced.** Respondents frequently stopped at citing needs, rather than giving detailed explanations about what product they wanted, who they expected to be using it, and to what end. Affording these new products was of concern in both the survey data and the case studies.

Tech Projects (# 31-33). Respondents' tech endeavors frequently revolved around software (218), and hardware (103), emphasizing terms such as —**upgrade,**” —**re**design,” and —**new.**” The most frequently cited software programs were ticketing, donor, and financial systems; hardware was most often computers and servers. However, **some organizations (24) stressed that they could not complete these projects or fully address their needs because of lack of resources.** Several were forced to reassess technology plans because of underestimated costs: —**w** had intended to install more shared LAN resources and these plans were abandoned because of cost overruns in other aspects of the project.” **Even those who did receive grants had problems due to unexpected cost overruns.** Some had to make painful funding choices: —**While our box office capacity was significantly improved . . . we could not raise enough grant money to purchase a true state-of-the-art ticketing system.**”

Tech Pressing Needs (# 60). Responses about product upgrades fell into three categories: software, security systems, and hardware.

- **Software** (145). Respondents particularly needed ~~more~~ recent versions of basic operating software.” Indeed, many seemed anxious about keeping up with software developments, with several using the word ~~antiquated~~” to describe their software. One wrote, ~~The~~ need to continue updating/replacing software is a challenge . . . Microsoft changes its underwear too often. Accounting programs make changes that are often unwanted and require a large investment of time to figure out.” Several were concerned about the costs and complexity of software that they wanted, such as Tessitura. **New or upgraded ticketing software and online ticketing was a stated priority for some** (27 and 33 responses, respectively). Some were not sure what ticketing program to use; as one wrote, ~~We~~ want to sell tickets online, but have difficulty choosing and affording adequate software.” Others added that they would prefer to change their current ticketing software so that they could bring their box office in-house. One was interested in ~~controlling~~ and maintaining our OWN box office, rather than lose money to ticket sales providers.”
- **Security, both for systems and data** (18 and 10 responses, respectively). Organizations were concerned about the possibility of losing valuable information on finances and audience development in the event that their hardware or software failed. Others wanted to ensure the privacy of online financial transactions, or ~~making~~ sure the account information of our customers is as protected as possible,” one commented.
- **Hardware** (109). Here again, there was concern about aging equipment and being able to afford needed upgrades. One wrote, ~~We~~ should be upgrading our equipment at a faster rate than we can afford,” and another bemoaned the ~~obsolescence~~ of equipment.” While many money complaints came from organizations with lower budgets, even organizations with larger budgets were dealing with problems such as ~~aging~~ hardware infrastructure.” **Some responses on hardware needs seemed well informed and confident** about the problems facing their organizations, and their possible solutions. Concrete goals included investing in a new server, networking, or better printers. One wrote, ~~We~~ know what we want. We have the business and technical acumen to design and implement [it] . . . Our challenge is related to our overall lack of capital.”

Similar to survey respondents, **case study organizations emphasized in earnest that they needed funding for the necessary cyclical updating of hardware and software.** This was a constant cry within each case study. Unless an organization was expanding to a major ticketing system, **there was little or no source of revenue to cover the costs of regular hardware upgrades. Case studies explored how such funding would be used, which varied according to the organization, their mission, and their general attitude toward spending money.** A small organization thought ~~having~~ a complete database that was custom-designed for our needs that not only tracked event attendance but also donors . . . would be fantastic,” but only ~~if~~ money were not an object.” Another interviewee also admitted that new hardware would be ideal but due to a particularly resilient attitude, the ED would rather ~~put~~ four hours into making a junk computer work before I’ll spend money to buy a new one.” At the other end of the spectrum, a group of interviewees from a large organization stated their goal to assist other arts organizations in purchasing Tessitura by becoming the ~~license~~ holder for a number of smaller

groups here . . . For others . . . who have done it, it's been a stretch, but if these small [organizations] don't do it they're going to fall behind. There's no better program out there.”

### Quantitative Survey Questions

- Only 13% of respondents felt that they kept current with new technology and regularly improved how they used it for audiences, donors, funders, and staff. Conversely, **a total of 86% either did not keep, or only sometimes kept, current with software.** The question was stated as “Your organization keeps current with new technology, regularly seeking to improve how you use technology for your audiences, donors, funders and staff” (# 47).
- **58% reported that their budgets allowed them to upgrade** software, computers, and other technology every 3-5 years—meaning 40% had not budgeted to upgrade even this frequently. 2% did not know (# 16).
- About **two thirds (67%) felt that their technology was “serviceable,”** while only 20% felt that their tech was state-of-the-market or better (# 29).

## Planning and Decision Making

Respondents tended to operate with strategic plans and around half had one or more written plans for other areas of operations. While an implied shortfall within the survey was the lack of bona fide tech plans, case studies and service organization heads strongly suggested that some degree of tech planning was, in fact, being conducted within the departments that would use the technology. Survey responses did reveal that IT staff rarely participated in the strategic planning process, and conversely, board members rarely participated in technology planning, oversight and/or decision making. Decisions about technology appeared to often be made in an ad hoc manner, as equipment broke and other problems arose.

### Sources

- Case studies present, with a higher degree of specificity and frankness, the range of ways in which technology decisions are made, and planning happens, within organizations, as well as the role of IT staff in planning (or lack thereof).
- The service organization heads corroborate this approach to planning.
- Few qualitative responses speak in depth, or with specificity, about their planning habits.
- Quantitative survey questions provide limited information about strategic planning and decision making, including when plans were created, who was involved, and budgets for planning, as well as any other types of plans that are created within organizations. Respondents were asked to self-rate their success at implementing plans. However, limited information was available about the process by which organizations plan. They were also asked about the existence of technology plans and how they made tech decisions.

### Planning Practices

On the survey, when asked about their strategic planning process, all case study organizations said they had a written plan in place. By the time of the case studies, little had changed in organizations' overall planning practices. Most had completed a plan within the last one to three years, while others had longer five- or ten-year plans that they reevaluated annually. Although most plans were created collaboratively by leadership, the boards of directors, administrative and artistic staff, and in a few instances outside consultants, only one organization had chosen to involve IT staff in the planning process. Most rated their planning skills as either excellent or good, meaning that they usually achieved their goals. Only one organization rated its planning process as fair (this was also the only case in which the board did not adequately consult staff in the writing of the plan). **While none of the case studies had developed a formal or written technological plan, per se, it was clear that tech-related planning was, in fact, taking place within specific departments,** such as marketing and development. The closest thing any interviewee had to a written plan was one organization's outline of desired technological accomplishments, created collaboratively across departments. But **case studies conveyed numerous examples of planning, progress and problem solving in the area of technology,**

including software installations and innovative use of technology for production. Some are presented later in this report.

**Most service organization heads** agreed that their members struggled with strategic technology planning, but **were quick to point out that advancements had been made in tech planning which was happening in more limited and/or roundabout ways, within departments.** One wondered if its members understood the financial benefits of tech planning, while another surmised that its members viewed technology more as a shift from paper to email rather than a change in strategy. Yet a third felt tech planning was slowly improving as its members ~~are~~ more and more bringing technology into the mainstream of thinking,” and even creating staff IT positions. Another cited a need for better technological planning, but stressed that it was happening within various departments, if not at the top of the organization.

Tech Projects (# 31-33). **The few survey respondents who were more specific about their successes with technology had found that active planning and budgeting had smoothed the process.** Engaging in in-depth software research generally led to rewarding results, as one described: —Search was long but fruitful. Found a system that fit our needs and more, and was within our budget.” Another found that research helped —pinpoint what we needed” and thus the product was less likely to surprise with unsavory quirks later.

### Quantitative Survey Questions

Questions covered who was involved in **regular strategic planning** and how often other types of planning occurred:

- **The vast majority (82%) had completed strategic plans in recent years.** 57% had completed a strategic plan within the last three years, and another 24% had completed one more than three years prior (# 10). However, there is no data about the types, levels, or duration of planning that was conducted by respondents. Planning can mean many different things. It can simply involve a few staff and board members over a weekend retreat or be conducted over a long time period. It might or might not integrate outside research, such as environmental scans, stakeholder interviews, and quantitative research on audiences.
- 80% reported that they included an economic strategy to support their goals in their strategic plan.
- Over three quarters of the 472 respondents included their board of directors (93%), their executive directors (90%), administration (89%), and artistic staff (88%) in the planning process. Other commonly included staff members included development/fundraising, finance, and marketing staff. Only **18% of respondents involved IT stakeholders in planning** (# 11). (Of that 18%, about half were organizations with IT staff and the other half, presumably, were staff for whom IT support is not their primary job.)
- **62% of respondents rated their ability to develop and implement plans highly,** as excellent or good (# 14).

While organizations seemed confident in their strategic planning abilities, **planning in technology** was a different story:

- **Only 24% had written a plan about information technology** or new media growth within the last two years (# 13).
- Only 16% reported that every department or area in their organization contributed to technology planning. 41% aspired to involve every department but are not yet doing so, while 31% involved some of their departments (# 46).
- When asked if their board of directors was involved in technology planning, the response was extremely mixed. Only 23% received help from their board either individually or via a committee. 44% said that their board was not involved, but that they wanted them to be. 26%, however, said that they had no interest in involving the board in their tech decision-making and planning (# 15).
  - This warranted further investigation of the 145 respondents who had no interest in involving their board. In fact, most of these same respondents (79-91%) generally responded positively to questions about investing in and adopting new technology. A series of attitudinal questions with Likert scales implied that leadership (executive and board) as well as staff endorse IT investments, are willing to adopt new technology, and have a clear vision of how IT supports the organization (# 53-56).
- Beyond their strategic plans, within the past few years, **the most common types of plans that respondents had created were for development/fundraising (67%) and marketing/branding (59%)**, most likely because those areas of operations drive contributed and earned income. Others had plans for audience/membership (49%) and creative/artistic areas (41%) (# 13).

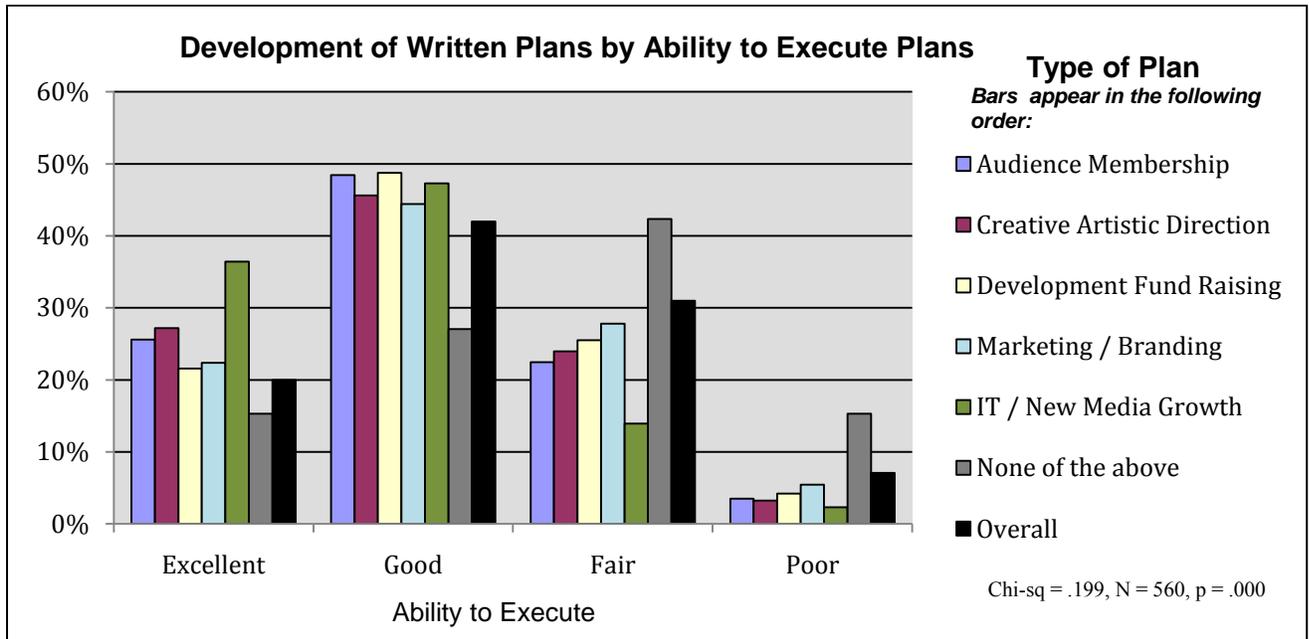
Further examination was done of **only the 123 organizations that had dedicated IT staff**. The chart below shows how many of them involved their IT staff in strategic planning, or if they had a tech plan, or both.

**IT Staff and Planning**

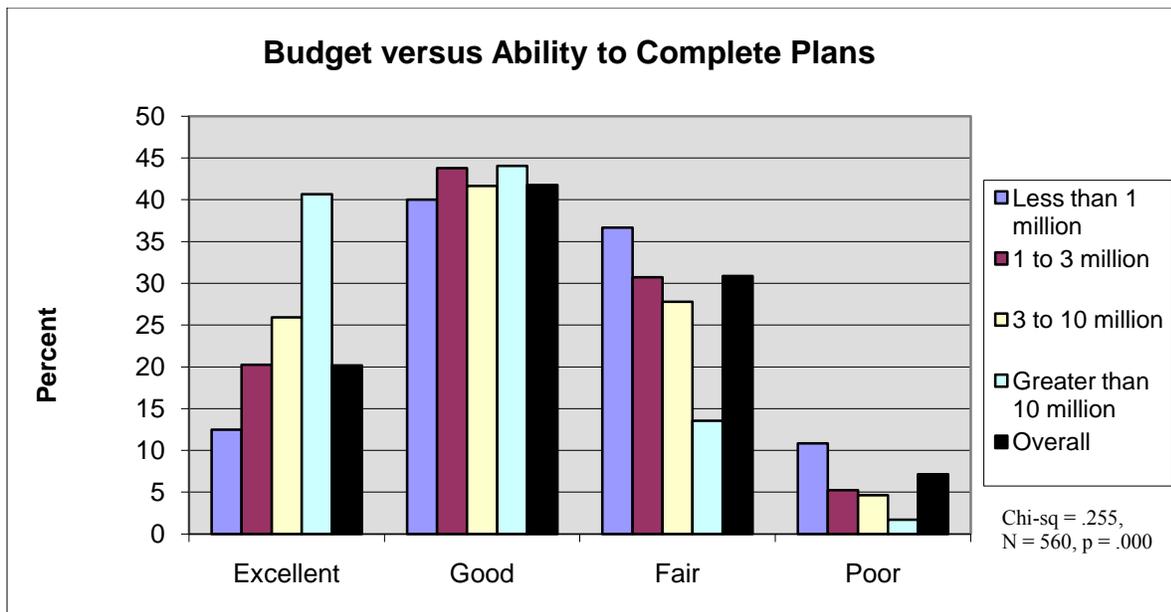
Of the 123 Respondents with IT Staff (# 27)	Include IT Staff in Strategic Planning (# 11)	Have a Plan for IT/New Media Growth (#13)
25	✓	✓
18	✓	
27		✓
53		
Totals: 123	43	52

As this chart indicates, **almost half of those with IT staff did not involve them in strategic planning and did not have a tech plan**. At the other end, about 20% met both of these measures.

As shown below, in a cross tabulation of these types of plans by how well they were executed, organizations that rated themselves highly (excellent or good) on plan implementation were those with a range of written plans, whereas those who rated themselves lower on implementation were those without written plans. **Note that organizations that had written technological plans (green bars) rated their overall planning abilities highly.** (This green bar represents *only the organizations that have written tech plans*, or only 24% of all survey respondents.)



**Those at higher budget sizes rated themselves higher at successfully developing and implementing plans**, as shown below in a cross tabulation of ability to complete plans (# 14). In fact, barely half of those at budget levels 1- 4 rated their planning as excellent or good, when compared to 84% of those with budgets over \$10 million.



Bars appear in order by budget size.

A cross tabulation of planning success by staff size rather than budget is not shown here but generated similar results.

## Decision Making: More Ad Hoc than Calculated

Within the case studies, **decisions about whether to purchase technology, and what to purchase, fell on different people within different organizations in a somewhat haphazard manner, as equipment breaks and systems become outdated.** Most staff in the case studies reported that their technology purchases were done on a case-by-case basis and heavily depended upon available funds and upon whether the current technology was usable. One interviewee reported repairing or incorporating technology as needed: *“There is no real plan on what we do if XYZ happens but we do what we can. It’s always kind of a catch-up scenario, try to stay a little ahead.”* Similarly, another representative said, *“We fly blind, from my seat,”* and another said, *“Our tech is driven by need.”* A fourth interviewee agreed, *“Usually we just [upgrade] as things fall apart.”* In contrast, one organization interviewed spoke of having an IT department that was organized, knowledgeable, and led decision making, which was driven largely by funding availability.

**Whether this ad hoc approach to investing in technology worked varied according to the case study organization, its attitude toward technology, and its resources.** At one small organization, technology was not a high priority, and it was manageable for the executive director to make all tech decisions because *“our needs are so intermittent; our equipment lasts for years.”* At another company, the high rate of turnover made the more collaborative decision-making process a little *“haphazard”* but generally effective. For another interviewee, the practice of staff to work as a team and consult with each other, coupled with their general tendency to stay informed about technology, made what might appear ad hoc from the outside a source of strength in decision making. However, in other case studies problems arose from the lack of organized decision making; at one organization the manager returned from a leave of absence to find that in the meantime outside consultants had hard-coded the website leaving staff completely unable to edit it. One organization simply wanted to learn how to use a state-of-the-art printing center it had received as a gift but hadn’t yet figured out, leaving it functioning as *“the world’s most expensive copier.”*

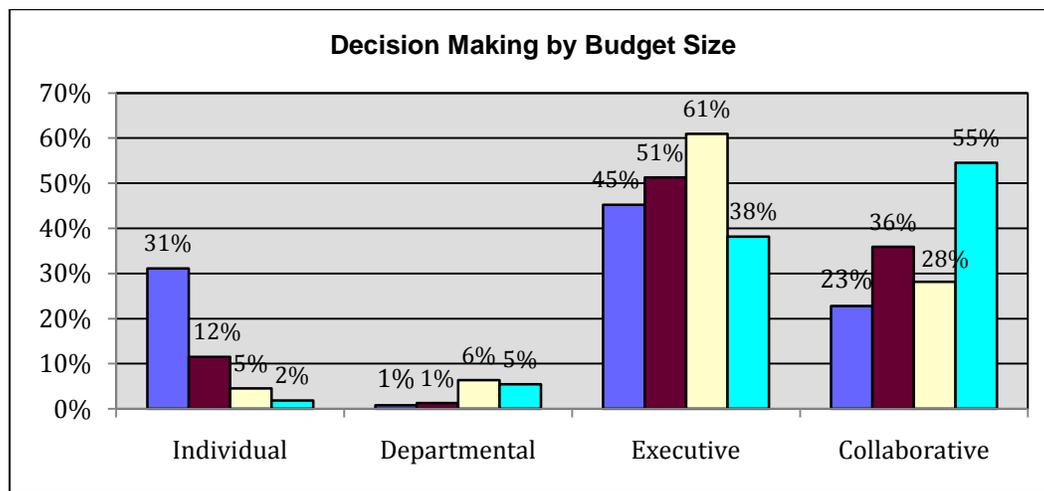
Tech Projects (# 31-33). **Survey respondents seemed frustrated about the amount of staff time needed to complete projects. But responses were split on whether this was due to inefficiencies or to unpredicted challenges during the implementation process and how these shortcomings were affected by planning.** Few provided specifics as to why these delays took place, although many seemed to be related to outside IT sources, such as one who was frustrated that it was *“difficult to get responses from the pro-bono firm.”* Others felt that delays were common when it came to dealing with technology in general: *“The turnover has not gone as quickly or smoothly as we would have liked, but this seems to happen with all new technologies.”* Lengthy project implementation was eating into staff workloads and already tight budgets.

## Quantitative Survey Questions

Survey data also showed a different distribution of technological decisions at different budget levels (# 18). The wording of the choices was as follows:

- (a) Individual Decisions – People purchased the technology they needed, if funds were available.
- (b) Departmental Decisions – Each department or area had its own technology budget and used it to meet departmental needs.
- (c) Executive Decisions – Technology decisions were made by a person or select group of people in upper management.
- (d) Collaborative Decisions – Technology decisions derived from a plan that all departments or areas helped to develop.

As the chart below indicates, individual decisions were common in smaller organizations because of their small staff. Departmental decisions were rarely made at all, regardless of budget size, perhaps because individual departments did not have their own tech budgets to allocate. Executive decisions were common regardless of budget size, but particularly for organizations in the \$3 to \$10 million range. And collaborative decisions varied but became more common at the highest budget levels. However, the wording of two of the four choices may have blurred one distinction. In small organizations, “individual decisions” might be the same as “executive decisions,” meaning that those two choices may have meant the same thing to those respondents.



Bars appear in order of budget size:



Chi-Sq = .349, N = 560, p = .000

## Integration of Data Systems

The topic of integrated software systems was one of the biggest issues on the survey and continued to be so in the case studies. Often the greatest success stories and worst disappointments that organizations reported had to do with the acquisition and installation of integrated software; experiences fell on a wide spectrum between frustration and satisfaction. Generally, organizations got new integrative software for two major reasons: one, in order to better track donations and ticketing, and two, in order to decrease the burden of work for employees who had to use separate systems. However, the extent to which organizations' software purchases met these needs appeared to depend heavily on both the systems they chose and the amount of technical training possessed by those who had to install and operate it. Those who impulsively purchased products or installed them haphazardly later found that their workload increased instead of decreasing. At the time of the survey, integrated software was an aspiration of many organizations, which particularly wanted it to join accounting with box office systems. The ultimate results of installation projects as reported in the case studies and surveys indicated what did and did not work in terms of integrated data systems.

### Sources

- Case studies reveal problems that arose around the issue of integrating data management software, and the role that research and training played in this process.
- Qualitative questions describe reasons that organizations needed or wanted to integrate systems and, in their discussion of technological projects, the results that respondents saw after installing software to integrate and manage data.
- Quantitative questions discuss the different systems organizations hoped to integrate.
- Interviews with the heads of the five service organizations show that they were aware of the importance of integrated data management and of the barriers facing members who were trying to integrate their systems.

### Desperate Times Call for Integrated Software: The Reasoning Behind the Switch

**Case studies showed how urgent need could be a catalyst for moving to an integrated data management system.** Some organizations were forced to buy a new system when vendors discontinued their current program. One had to switch when its program, Artsoft, was “about to become extinct...[and] had stopped providing service.” Another had to buy a new product when their software was bought out: “the new company stopped supporting the software being used, forcing migration to their new product.” Others who were interviewed bought integrated software when they could no longer stand their current products. Two jointly purchased Tessitura as a “desperately needed fix to eliminate the separate software/systems being used,” and a third realized that they “couldn’t move forward until we could link [ticketing and donor data].”

**Service organization heads also emphasized the need for their members to integrate software systems**, but believed that many could not afford it. “The field has always struggled [to find a] cost-effective system for managing and integrating data,” TCG said, adding, “one of the big problems is that arts organizations are not managing and recognizing the value of the data they have.”

Tech Pressing Needs (# 60). **Here, too, survey respondents most frequent technological need was for integrated data/software systems, particularly in the areas of ticketing and fundraising** (286 responses). They wanted to merge important databases and benefit from a more multi-faceted repository of information. Responses varied widely as to both the intended uses of integrated software and the degree of specificity and knowledge that responses displayed.

More than **half were specific about the types of systems they needed to integrate** (158 respondents). Most prevalent among them was the need to integrate fundraising or donor databases with other systems. Organizations wanted to use the information they could gather from these different systems to create a clearer picture of their patrons and donors. A similar theme emerged in responses that focused on integrating systems related to specific constituent groups, such as students or volunteers. They wanted to use audience data in their marketing and development campaigns. Finally, other respondents stressed the need for integrated ticketing software (such as Tessitura), which was a pressing financial need for some.<sup>31</sup> The shortfalls of having separate systems were clear in the tone of desperation of some of the comments: “The ticketing/donor system we use is awful, does not integrate with anything else, and is not user friendly. It is critical that we replace it,” one emphasized. Mentioned less frequently were accounting software and other database programs.

### Quantitative Survey Questions

Quantitative questions reinforced responses in # 60 about the types of data needed to be more actively managed using integrated software systems.

- Most tellingly, **45% aspired to integrate their ticketing and donor development systems** (or the separate systems they used to track purchases/admissions and donors). 31% had already integrated these systems, and 18% had integrated them somewhat (# 41).
- 37% aspired to integrate their **financial and other administrative systems**. 21% had already integrated these systems, and 35% had integrated them somewhat (# 45).
- 23% aspired to actively manage detailed information about **donors**, such as demographics, solicitations, donation history, patronage, attendance at fundraising events, and personal interests. 32% already managed this information, and 44% said they managed this information in only some ways (# 39).

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<sup>31</sup> Carnegie Mellon University’s Center for Arts Management and Technology performed a 2009 study entitled Ticketing Software Satisfaction Survey. The study looked at issues of software satisfaction and reasons for software choice. However, because there was an overrepresentation of users of Tessitura and Ticketmaster products (those vendors helped to promote and distribute the survey) –respondents do not represent a true cross section of the arts and culture community, this data cannot be used to infer market share.” Researchers hoped to repeat this study with a more representative sample.

- 24% aspired to manage information about **audiences**, such as demographics, subscriptions, attendance, and personal interests. 25% already managed audience information, while 48% managed it only somewhat (# 40).

### **Buyer's Remorse: The Difficulties of Choosing Relevant Software**

One prevalent theme throughout the survey and case studies was uncertainty about which data integration system to choose, and with good reason: **case studies showed that organizations who purchased software without knowing what they really needed could become saddled with an irrelevant product.** For instance, one interviewee's staff purchased new software without having a sense of whether it was the best product or even of what it could do, leading to several problems after implementation. Part of the problem was not knowing what to expect from the products, but just as important was considering the organization's needs ahead of time. One ED said, "I think that good development software is similar to good accounting software, which is really about thinking about what you want before you set it up to begin with . . . but I don't think they [planned in a similarly detailed way] when we bought Raiser's Edge." Another organization was rushed by a vendor into buying a product that did not address their need for a software that could "track memberships," "allow for walk-up, phone and online ticket sales," and "integrate with the resource development software to eliminate double entry."

Tech Pressing Needs (# 60). Many responses (114) exhibited **a strong inclination to integrate data systems, but also uncertainty about how to do so and what the end results would be.** Some knew what they needed but not how to describe it, such as one that had "outdated production and office equipment that doesn't work together." Others mentioned integrated data systems, but only in vague ways. Many lacked confidence and knowledge in how to go about it. "How do we accomplish the patron (tickets and donors) integration we seek?" one asked, adding, "Ticketmaster, costs, and time all make this difficult."

### **Successful vs. Unsuccessful Installations of Integrated Software**

**Case studies showed that the manner in which new data management software was installed had a huge impact on its ultimate usefulness.** Concerns about choosing software (outlined in the previous section) were often echoed in descriptions of the conversion process. While some made the transition to new software fairly smoothly, others had problems stemming from the fact that they didn't know how to get the product working. The effects of this lack of knowledge were still felt by organizations years later, such as for one company that wanted to integrate their donor software, Sage, with their accounting software, QuickBooks. They reported, "We were told there was going to be a patch for Sage to work with QuickBooks but it never worked."

**Also within the case studies, staff members who lacked the knowledge necessary to install and operate new data management software found that these purchases led to more work for employees, not less.** Using incompatible systems, for instance, forced workers to double their data entry. At one organization using Audience View and Raiser's Edge, the "membership manager ends up having to double-enter" information into both databases. Another case with three different systems for ticketing, donor information, and accounting was resigned to importing information from the online tickets module into Excel, and finally back into Raiser's

Edge. Although in recent years the staff had figured out ways to simplify the burdensome transfer, one interviewee reported, “Every year when I have to do it, I curse the day I was born.”

**Successful installations, on the other hand, were often the result of careful pre-purchase research, staff who had technological expertise, and support from leadership and peers.**

One case study organization, for instance, spent over a year researching and installing Tessitura. A staff member had looked into Tessitura in a previous employment, and information gleaned from his experience, plus input from peers and help from a tech-savvy board member helped them choose the software. While the transition was lengthy, the organization was ultimately pleased with the result. Two other organizations interviewed were able to share preliminary research duties and pool their technological resources by purchasing the software as a consortium. While there was still a steep learning curve, they were able to learn from the experience and were looking forward to helping future consortium members install the software. (Refer to the Case Study 6 sidebar on the following page.)

**Effects of the Newly Integrated Software**

The results of data integration varied widely among organizations in the case study and survey data. In both sources, there were certain aspects of the new software that did and did not work. Their examples reveal the improvements that result when integrated systems work well, and provide cautionary advice to avoid the pitfalls of poor decisions and processes.

At the time of the interviews, two of the case study organizations had installed Tessitura, and another had recently purchased it. **The data gathered from these companies indicated that there were both strong advantages and disadvantages to using a truly integrated system instead of the multiple databases they had before.** One barrier was the prohibitive cost of the new programs, including a huge upfront cost in addition to ongoing dues. A second barrier was the difficulty installing and learning to operate them. For one organization, problems arose from the choice of consultants: “The initial setup did have challenges. I’d recommend that during this you have a systems professional. We didn’t use anyone from Tessitura . . . and it took a lot of years before we could use all the tools.”

**However, those that had installed integrated systems, particularly Tessitura, were for the most part very positive about their results, including the ease of compiling comprehensive donor/audience information, tracking finances, and cutting down on duplicate entry.** An interviewee reported, “Setup takes about a tenth of the time it used to, troubleshooting it is really easy, and the resource of other users across the world who use it as this free exchange of information [is] really helpful.” It was also helping to gather more specific data: “We know down to the cent where our dollars are coming in from, and that helps every department it touches.” Another representative said, “The wonderful thing . . . is that it was the first time we’d had an integrated system . . . You can pull a complicated list, but before, we used to go through all these gyrations.” Even one interviewee that was not using the software as fully as possible was optimistic: “I was at the [Tessitura] conference for the first time last year and there are organizations there where it feels like they’re in college and we’re in kindergarten as far as managing the software. It was very inspiring and we feel like we can begin to use it to more fuller capabilities.”

Although much of the information on integrated systems from the case studies was Tessitura-centric, **several organizations that were not currently using the program still hoped to integrate their software systems in the future**, and others referenced it as a superior product, or ~~the~~ **only one that is truly integrated.**” They recounted their experiences with products that were marketed as comparable, but that did not, in practice, have the capabilities of Tessitura. At the other extreme, the smallest organization was considering trying the free software eTapestry to begin integrating data. Considering their small size and staff, this was a legitimate step forward.

Tech Projects (# 31-33). On the survey, successful switches to integrated software often related to ticketing and development. **Although few were specific about what helped the process work, most described how, when complete, the integrated systems helped to “manage ticket sales and fundraising.”** One theorized that their integrative approach worked well because of the new ~~system~~ **models our business processes.**” A few that were using Tessitura found that purchasing the software as a consortium had significant benefits: ~~combined~~ **talent and expertise, reduced competition, knowledge sharing, decreased workload to execute the project and shared costs.**”

However, some reported that **even after converting to new software, their programs would not integrate with other systems.** Generally seen between donor and ticketing software although occasionally with website editors, **this problem seemed either the result of software incompatibility or the program being inaccurately advertised.** One respondent stated, ~~The~~ **two systems, supposedly integrated, are not well integrated. Vendor is not able to fix the flaws satisfactorily.**” In the case of software incompatibility, the task of getting the programs to ~~talk~~” to each other generally fell to staff to attempt to resolve.

### **Case Study 6. The Advantages of Integrating Software Systems As a Consortium**

Two arts organizations located in the same city purchased Tessitura for audiences and donors as a partnership, an arrangement that allowed them to not only share the costs but to help each other with aspects such as preliminary research and installation. A third partner (who eventually dropped out of the partnership) took the lead on fact-finding about the new software and recommended the best product to the other partners. The two remaining organizations then installed the new software. There was a steep learning curve for staff due to the much greater sophistication of the new product: ~~It~~ **was like switching from a ‘78 VW Bus to a new Porsche,”** one interview said.

Despite the initial challenges of installation, they were able to learn from the experience and planned to bring even more organizations into their consortium so that all could share the benefits of the new integrated systems. Soon, the number of companies using the program would go from two to four (including the original third partner, which had rejoined). ~~We~~ **‘re really glad we did [join the consortium],”** one representative said. ~~It~~ **seemed very impractical to do anything else. The price was going to drop significantly going in as a trio.”**

## Website Upgrades and the Shift to Social Media

More than for any other issue, there was a striking change in attitude towards website and social media use between the time of the survey and recent interviews. Social media was barely addressed in survey responses, and website upgrades were treated as just one more non-specific technology need. However, during the interviews with case study organizations and service heads, it became clear that using online resources to reach out to and engage audiences was an increasingly high priority. Organizations described aspirations and goals for social media applications that ranged from advertising and marketing to education and artistic activity. Website upgrades went beyond the more generic comments made on the surveys about updating content or design, to integrating video, blogs, and interactive software. The strategies for implementing these applications revealed that companies had ambitious and dynamic goals for their online presence, even if they were not yet able to realize these goals.

### Sources

- Case studies show the extent to which organizations had changed their views of social media and the role of their websites, providing numerous examples.
- In the qualitative questions, website improvements are discussed frequently yet superficially, but only a few discuss social media.
- Quantitative questions show how many organizations hoped to create social networking communities and how they used online tools for audience engagement.
- Interviews with service organization heads mention successful recent social media projects undertaken by members, but only speculate about their long-term impact.

### The Radical Expansion of Social Media Since the Survey

On the survey, only a small percent of organizations reported a desire to use social media. However, by the time of the case studies and interviews with service organization heads, social media was a frequently discussed issue, and one that many were highly interested in pursuing.

Tech Pressing Needs (# 60). On the survey, companies mostly discussed social media in terms of communication and outreach to audiences. **38 respondents needed to improve communication**, such as email and e-newsletters. One wrote, “Email marketing is not where we would like it to be. There has got to be a way to have e-newsletters without an enormous fee.” Others hoped to **increase communication using social media techniques** (15) and were interested in **using online tools for marketing strategies** (14). Some mentioned podcasts, video, and blogs, while others were interested in social networking, such as one who wanted to work on “development of Facebook and MySpace type viral marketing plans.” Not all respondents were positive about online marketing however; one wrote, “Online advertising. . . is

cost prohibitive . . . We anticipate extreme backlash from our aging patrons as we transition to 95% of our information being disseminated online/via email.”<sup>32</sup>

This tentative approach to online marketing and social media became far more enthusiastic in the case study interviews. **Since the time of the survey, every organization interviewed had increased its use of social media and Web 2.0 programs, and most saw a benefit to doing so,** even if this benefit was not easily quantifiable in concrete terms such as tickets sold or donations. **The interviews with service heads also confirmed that members in all five disciplines had accelerated their use of, and interest in, social media as a new way to reach audiences.** A recent Dance/USA survey showed a high level of interest and involvement in social media<sup>33</sup>, and this association had gone nearly paper-free in its conference proceedings. It was about to launch the first social network in the nonprofit arts field for its members. TCG had just held its most energetic leadership teleconference, at which members discussed their rousing success at using Twitter to generate audiences. Members of all service organizations were integrating social media into existing positions and hiring outside contractors to help develop strategies.

**The most frequently mentioned social media application in the case studies was Facebook, which was currently being used by every organization interviewed.** Most used Facebook to increase their online presence and to post updates and reminders about upcoming events. As one put it, Facebook was a way to “reinforce awareness of what’s happening . . . What’s that old saying—you have to hit people seven times before they realize what’s happening? This is our way of hitting them.” However, not every organization used Facebook in the same way; one used the social networking site to gather feedback from audiences, while another used it to track demographics, and a third found it a “surprisingly effective tool in dealing with donors.” **Service organization heads also described members who successfully utilized social media.** D/USA brought up one member that had “extraordinary success with Facebook and Twitter.” APAP remembered one organization that hired an employee specifically for viral marketing and street teams: “They added 40 or 50 concerts and it made the marketing department insane . . . but [the viral marketer] was selling out these concerts.” Youtube was another commonly mentioned social media, and to a lesser extent sites such as Flickr and Myspace.

**Some case study organizations used social media not only to attract audiences but to provide a window into their creative process.** One filmed all design presentations and posted them online “for the purpose of sharing it with others . . . We’re trying to make [the audience]

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<sup>32</sup> A study in 2008 by Convio called The Wired Wealthy researched the major and middle donors of nonprofits to determine how many of them were online and willing to make financial transactions. The study was segmented by the age of the donor, and found that more of them than assumed were not only accessible via internet but doing their banking and making purchases online. Those two measures were used as proxies to gauge whether or not older people were likely to donate. See Callahan Consulting’s summary of that study, with an adaptation for the arts field, at <http://forthearts.org/publications/wealthy.shtml>.

<sup>33</sup> In October 2009, the Dance/USA survey received 167 responses (response rate of 14%) of practitioners aged, on average, 42. Almost all read and watched videos, and listened to music online, and 2/3 used social networking sites. Next in line were activities such as reading online forums, blogs and wikis, and watching podcasts and webinars. Lower, but still notable numbers (20-33%) were taking a more active role, including posting to blogs or news feeds, uploading videos or music, using status updates, etc. While most participated for professional reasons, just slightly more of their participation was for personal rather than professional use.

realize more and more about manufacturing and explain the degree of cost, and we want them to know and understand craft and be better observers . . . It helps explain the . . . underlying principles of a company like ours, and why we do the kind of work we do the way we do.” Another organization described a “Twitter event” at one of its performances during which the audience “would post the pictures [of the event] and tweet about what’s going on . . . I’ve never seen so many people with their handheld devices out.” (Twitter was the second most commonly mentioned tool in the interviews.) Others posted podcasts and videos of performances online.

There were some differences in the way the case study subjects and the service organization heads viewed the results of these social media strategies. Perhaps because social media is young and lacking in success measures, **a few service organization heads questioned whether social media was a short-term fad or a long-term solution.** One wondered about developing effective but reasonable strategies: “How far should you push in terms of blogs and rehearsal diaries and podcasts . . . What is the return on investment and when is enough enough?” Another added that although members are “plunging in” to try social media, they are probably not optimizing it and the true results are unknown: “What we know is all anecdotal.”

**However, the case study organizations mostly felt that the effects of social media initiatives, while hard to pin down, were generally positive.** Most companies either did not know or were just beginning to measure the return on investment of using time and resources to maintain social networks. More than one case study mentioned that it was difficult to tell the impact Facebook had on their actual attendance since online “friends” could be noncommittal; one reported that it “certainly hasn’t been a money maker” and that when they offered discounts on Facebook, few “friends” took advantage. Still, several did report that they could already see these tools were useful to “build a relationship with a certain segment of your audience,” as one said. An interviewee also pointed out that using these tools entailed a “tremendous shift away from paid advertisements . . . mailings [and] newsletters.”

### Quantitative Survey Questions

- As mentioned above, there was much less emphasis on social media in the survey than in the interviews. Only one question specifically addressed social media; however, responses indicated that **44% of organizations aspired to create a social-networking community for their audience members.** Only 15% had already done so, and 33% had worked with social media to some extent (# 38).
- Other questions may, or may not, hint at the use of social media. 81% desire to use technology better to reach new patrons (# 42). Similarly, 80% desired to use technology better to develop patrons. (# 43).

### **The Website as an Integral Part of the Artistic Mission**

On the survey, when organizations mentioned their desire to upgrade websites, it was often as just one item on a long list of other pressing needs, often without any further detail about how or why the website should be changed. In contrast, during the case study interviews, **some discussed the importance of their website to their artistic mission, displaying a forward-thinking and creative attitude that made it clear that companies were increasingly planning**

**highly specific strategies to improve the user experience.** On both the survey and case studies the most successful and exciting web upgrades were those that used media, or interactive features, to involve audiences in everything from the creative process to choosing performance seating. Survey data is presented first, in order to show this contrast.

Tech Pressing Needs (# 60). 150, or 29% of total comments, mentioned organizations' websites or using online tools. **Of these, most (103) were concerned about updating or improving their websites.** For instance, one wrote, "we want to have an online searchable database for writers, producers, and anyone interested in new work." Some also enumerated obstacles to accomplishing these ideas, including lack of expertise, training, and funding: "the high-cost to maintain and enhance our website is an ongoing concern." Many were vague about the nature of online upgrades, often throwing in "website design" or "redesigning website" within a list of other technology needs.

Tech Projects (# 31-33). Respondents were more specific about what worked during web upgrade projects. Successes in this area seemed connected to having the right people to manage the project as well as finding a solution that was tailored to the organization's needs (43). "The website developers did an excellent job of involving everyone organically in the process," one wrote. **Those that had upgraded their websites were pleased with their enhanced ability to reach potential patrons, especially when focusing on communication and marketing tools such as social media and interactive features.** As one wrote, "Getting out into the cyber world has worked well for us in getting younger constituents."

**The case studies revealed that companies were increasingly using their websites as a marketing tool and an artistic platform.** They appeared to be shifting their concept of the websites as a mere source of information to a holistic hub for cultivating their community of supporters through audience engagement, ticket sales, and donations. As one organization put it, their marketing initiatives are "supposed to drive people to our website. Our website is supposed to drive people to [our organization]. That's our priority. We want them to be informed when they get here, which is why we put so much information on our website." Several other organizations mentioned that maintaining "a robust website" was a priority for them. They felt that software, particularly if it is integrated, is key to making this shift.

**Integrating social media and applications into websites** came up often in interviews. One organization had undergone a "total redesign of the website to include an advanced search engine, blogs, and video components," as well as "online video events staged on the . . . homepage intended to rebroadcast past . . . events and keep . . . brand awareness year round." Another interviewee was interested in integrating their separate blog, as well as audio/visual extensions, into their website. They felt that the website should "support video and audio so that it's in the forefront."

**In the future, several organizations hoped to expand their websites and online presence in specific ways.** One hoped to update its website to include a select-your-seat feature that would integrate with Tessitura (despite such a feature's steep cost) and to support video, audio and blogs. Another planned to update their outdated website to include video capabilities and other

marketing initiatives. One respondent also mentioned a desire ~~to~~ make it easier for our customers to find our product online and purchase [it].”

### Quantitative Survey Questions<sup>34</sup>

Survey questions also addressed ways in which the website could be a development and marketing tool.

- **47% already used online tools to sell tickets, and 34% did to some extent.** 15% aspired to begin doing so (# 34).
- **31% used online tools to accept donations, while 42% did to some extent.** 25% hoped to do so (# 35).
- 44% used online tools to advertise their performances, and 43% advertised online to some extent. 12% aspired to do so (# 36).
- 46% felt that they had the staff, tools and support to effectively update their websites, while 45% felt they could update their websites somewhat. 10% aspired to do so (# 37).

#### **Case Study 7. The Importance of Enhancing Websites to Build Audiences**

A large organization emphasized that its website was not just one of several methods to disseminate information, it was crucial to their mission. In addition to planning marketing strategies to drive audiences to visit the website, they planned to use the website as a window into their behind-the-scenes artistic activities: “We want [the audience] to know and understand craft and be better observers. Show them that a lot of what we do is backstage. It helps explain the . . . underlying principles of a company like ours, and why we do the kind of work we do the way we do.” They also emphasized the importance of keeping up with newly tech-savvy audiences. “We are trying to draw people to our website, because there is such a decline in all other kinds of traditional media . . . We try to have an eclectic audience, so we try to get comfy with newer vocabulary. We’re also trying to provide content to younger audiences to make them more informed.”

The leadership clearly felt that the dynamic, engaging content on its website was a reflection of their artistic mission. “I personally think that content on our website feels to me like the most important thing that we’re doing right now—the fact that it changes constantly,” one interviewee said. Far from viewing it as one of a host of non-specific technology upgrades, staff viewed the website as the portal to their organization and wanted to use a variety of tools to make it more involving and user-friendly for the audience.

<sup>34</sup> Refer to the Overview section for a visual of these statistics.

## Other: Art Production

**Among other technology issues, the only one mentioned with much frequency or depth was art production. Production-related technology was not a major issue on the survey, but several case study interviewees described ways they were incorporating technology into their performances. For them, production technology, especially video, was integral to their creative process, since artists and audiences expected them to accommodate new and innovative performance formats. Others interviewed considered production technology to be less important than more traditional approaches to performing. Advances in production technology opened up new artistic opportunities, but also new complications, in costs and union contracts.**

### Sources

- The case studies reveal how organizations were utilizing production technology, particularly video, and the ways in which this technology impacted its audiences, artists, and creative process.
- The interviews with service heads also mention production technology and other ways organizations were using technology to change the way audiences experienced art.
- Quantitative questions provide limited information about organizations' general desire to improve their production technology.

### Production Technology

Only one question on the survey asked specifically about the production-related use of technology, and respondents mentioned it infrequently in the open-ended questions. **Several case study organizations, on the other hand, passionately described their use of new technology as part of their artistic products.** Most commonly highlighted was the use of video. Other technologies mentioned included higher-tech lighting, sound equipment, and mechanized stages of the kind seen on Broadway. The degree to which companies used video and projection in their work varied; for some, it was vital to stay abreast of current artistic technology. One emphasized the importance of ~~producing~~ cutting-edge theatrical works on our stage; we need to reinforce this position by being at the forefront of technological advances in the field." Another pointed out that increasingly technology-savvy artists and audiences wanted and expected to see video capabilities in their performances: ~~For audiences]~~ the level of sophistication that's available is setting higher expectations for delivery." There can be cost implications, to pay contractors for video design, and to purchase or rent equipment. **Not all organizations were equally enamored with using high-tech projection methods;** one company had not used technology in performances to any great extent and felt that ~~the state of what one can do [with technology]~~ is always changing. But for me the art always has to be driven by the concept of the work, not by what's sensible or what's an interesting trick." Another representative reported, ~~With [our discipline] it's Luddites with torches,~~" and technology was used very little.

**The incorporation of video and other technology into art raised issues related to ethics and union contracts**, some reported. With two case studies, the performers' unions believed that new technologies might take work away from artists. For instance, a certain synthesizer, the Virtual Orchestra Machine, can essentially replace an orchestra; this "creates worries about job securities." One interviewee said that "union contracts are not keeping up with the changes" for performers appearing in videos. One felt that the question of compensation when capturing video of performers will "come to a head" in union contracts in the next five years. A few who were interviewed wanted to invest in new production technology. One hoped to purchase a new laser cutter; photo and video equipment; and software for video editing, among other things.

**Interviews with service organization heads also briefly mentioned production technology, including union contracts.** For instance, APAP reported that artists were incorporating new technology into their stagecraft in interesting ways, but in a manner that sometimes challenges presenters to deliver. Service organizations also commended members with creative distribution methods, such as one who "did a case study on radio broadcasts—they got some artists to be available during the broadcast for online interaction with radio audiences listening to it . . . It's a way to make live interaction around a radio broadcast," LAO reported. Service organization heads reiterated the same concerns about union contracts as expressed above.

### Quantitative Survey Questions

At the time of the survey, 13% were already using state-of-the-market performance-related production technology to their satisfaction. The meant that **77% saw production technology as an area for growth and improvement**; 48% of organizations aspired to use it, and 29% used it somewhat (# 44).

#### **Case Study 7. Production Technology as an Audience Engagement Tool**

A large organization was both focused on and excited about using technology, especially video, in performances. They felt that new work and tech-savvy audiences increasingly required accommodation to cutting-edge production techniques. "We're finding more and more that [shows] are written with video in mind and that the designers and directors are imagining ways to tell the story with new technology," one representative said.

This new emphasis required them to make changes to their artistic process. "We use a lot more resources creating content, which is to say we're making movies before [the performance] so that we can project the movies as part of the [show]," an interviewee reported. This requires them to hire outside videographers, as well as to buy and rent newer equipment. Although they expressed concerns about the reaction of unions to the footage being used onstage, they still considered technology an essential part of contemporary art. They believed that "as a new generation is emerging, our narrative language is changing . . . [to] content that's sort of a hybrid of actors and technology . . . , film and theatrical direction . . . , stagecraft and storytelling."

## Mellon Proposed Solutions

**Organizations were presented with possible solutions for some of their technology needs. One possible intervention Mellon asked about was whether a course on strategic technology planning, to be designed by an intermediary, would be beneficial to the field. Opinions by both survey respondents and case study interviewees were mixed. Endorsements and suggestions for content were given, as were reservations related to the usefulness, relevance, and necessity of each suggestion.**

**One, a course on strategic technology planning, was an option suggested to both survey respondents and case study interviewees. During the case studies, the possibility of creating a website for comparative software reviews was mentioned. Because of Mellon's interest in supporting a technology course, this section also addresses survey questions about organizations' professional development practices, including their willingness to pay for such training.<sup>35</sup>**

### Sources

- The case studies display a range of opinions on the value of a strategic technology planning course or comparative software website. Organizations explained the reasoning behind their concerns and made suggestions about possible content.
- The qualitative questions focus on the course option. Respondents were asked what courses they had attended in the past (# 65). Those who were uncertain about the usefulness of a strategic planning course explained their reservations (# 67), and why they would choose not to send their executive director to such a course (# 69).
- Quantitative questions explore how respondents previously pursued professional development opportunities, including funding them (# 62, 63, 64) as well as the usefulness and logistics of a course (# 66, 68, 70, 71).

### Professional Development History and Interest

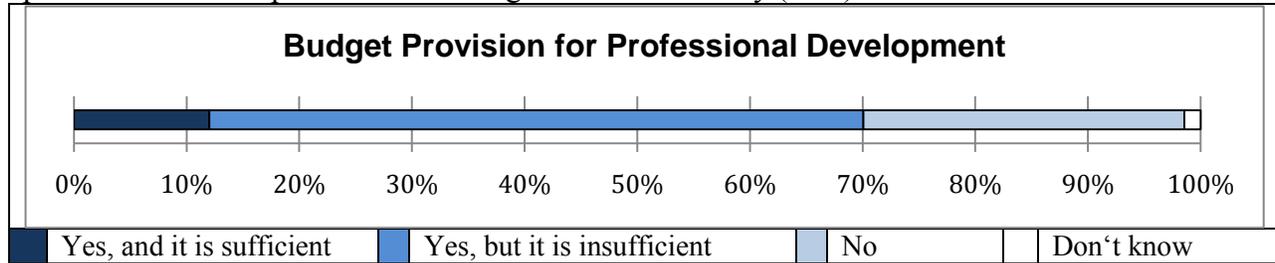
Organizations had pursued professional development opportunities in the past and paid for them in some cases. Survey responses showed the types of trainings pursued, particularly those that were technology related, and the nature of the fees paid.

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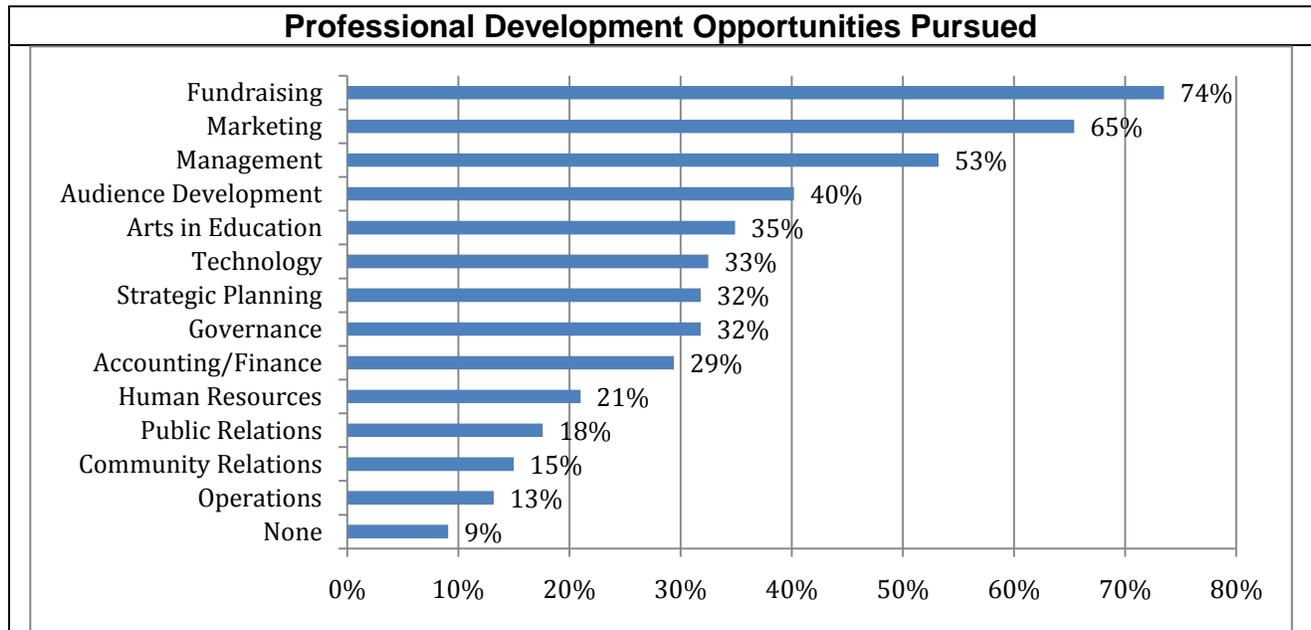
<sup>35</sup> Presumably, respondents' ability to pay for professional development may have been severely impacted by the economic downturn, such that the lag between the survey and this report may have resulted in different observations. It is important to note that in fact, once a pilot course was designed and offered to an invited group on a tuition-free basis, there was a high response rate. That course was offered in August of 2010, after the research contained in this report was conducted. Refer to Mellon's Postscript to this report for further information about the course curriculum, structure and timeline.

## Quantitative Survey Questions

As shown in the chart below, **87% of respondents either had no line item in their budgets for professional development or an insufficient one.** Only 12% felt that the amount allotted for professional development in their budgets was satisfactory (# 62).



As the chart below indicates, the professional trainings that respondents pursued most often included **fundraising (74% of organizations), marketing (65%), and management (53%). 33% had attended trainings on technology (# 63).**



Responses indicated that **85% of organizations always or generally paid a fee to participate in these trainings (# 64).**

Tech Courses and Seminars (# 65). This question asked survey respondents to describe any technology-related professional development opportunity staff had attended. **By far the most frequently attended trainings were related to database management,** most notably ticketing and donor data (103), followed by marketing and web presence (65), as well as website development training (20).<sup>36</sup>

<sup>36</sup> Of these, Tessitura was the most popular, with 38 respondents attending their conferences and trainings. 36 responses mentioned 16 other name brand database programs, including Filemaker, Archtics, Donor Perfect, Theater Manager, ChoiceTicketing, and Blackbaud; 29 others were either vague about database software or mentioned

## A Course in Technology: Endorsements, Reservations and a Note on Interpretation<sup>37</sup>

Survey respondents were first asked in # 66 whether a course in strategic technology planning would be useful to their organization. Of the 552 respondents, **about 80% indicated that a course would be useful, while 20% (111) were largely uncertain or doubtful that a course would be useful.**

However, the wording of # 66 raised interesting challenges in its interpretation, and was as follows:

*Would a course in strategic technology planning, featuring content specifically designed for performing arts organizations **be useful to your organization**? Assume that such a course would be intended to help your organization make effective **short- and long-term** decisions with regard to information technology investments and deployments, and **specifically in support of your organization's mission, overall strategy, and long-term goals.***

First, it did not ask if organizations would attend the course, instead asking if it would be useful. Second, it implied that the course's syllabus would be somewhat comprehensive. Third, it implied that a course would be tailored to the respondent's needs. Finally, the survey text did not indicate whether the course would need to be paid for by organizations or would be offered for free.

Then, # 67 asked respondents who felt negatively about the usefulness of such a course to explain their reservations; **169 did so, including 67 who had felt positively about the course's potential usefulness** (67 of these comments came from respondents marked "definitely yes" or "probably yes" that such a course would be useful). The comments expressed a variety of reasons for hesitation, ranging from organizations' internal limitations to concerns about the course content. One comment illustrated most of these concerns:

*I have worked for several non-profit arts companies and even though the organizations were similar, the needs varied pretty widely. Plus, a seminar affects one staff person and does not necessarily change the minds of the decision-makers. The challenge is not*

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generic database programs, such as Excel. Others focused on marketing and web presence (65). 28 attended trainings related to marketing, some specifically mentioning attending trainings on social media and PatronMail. In a similar vein, 17 respondents had paid for training on design software, such as Adobe and InDesign; most of these programs dealt specifically with graphic design, but a few helped with sound and video editing. Those that mentioned website development training (20) were generally vague; a few, however, did refer to content management systems such as SharePoint and Drupal. A portion of respondents (40) were unclear about what trainings they had attended. One simply wrote "applications," while another responded with "specific training on our new software." Others described how or who was trained, but not on what: "In general, learning was primarily through peer exchange, networking events, and industry conferences. Focused technology coursework was primarily through staff." A few mentioned that IT staff or consultants held occasional trainings on relevant technology. A small number (10) had participated in trainings concerning financial software, such as Quickbooks, Great Plains, and Sage.

<sup>37</sup> In response to this survey, Mellon asked 72 arts organizations to participate in a pilot for a strategic technology planning course, to be facilitated by NTEN, NPower, and Idealware. Refer to Mellon's Postscript to this report for further information about course curriculum, structure, and timeline.

*finding the right technology, it's funding it, implementing it, and changing staff behavior to get them to fully utilize it.*

The case studies were ambivalent about the technology course, with most feeling unsure of the value of this proposed solution. Both endorsement and reservations are presented below.

Reservations about Tech Course (# 67). **In this question asking respondents to state their reservation, funding was the most frequently cited concern (60).** About half of these respondents were **concerned that they would not be able to pay for the course** and/or the –fees involved (travel, housing, etc.).” Others did not believe that **they would be able to fund whatever the course would recommend.** As one representative explained, –Everything [requires] funding to implement. It is frustrating to know what can happen and not be able to make it actually happen.”

**Another group (53) explained that they were unlikely to be able to attend the course because of internal issues,** such as lack of time and staff. 30 respondents felt that they did not have adequate time to fit a course or its recommendations into their schedule; about half of these (13) did not feel that it was a priority. **Almost all organizations that mentioned time or prioritization (28) had budgets of less than \$3 million.** A similar issue was lack of staff to devote to technology or a course (15). 8 others felt their technology problems were related to staff attitudes, such as one who wrote, –We are very small and some are very resistant to change. We can expound on great ideas, but the warm, comfy security of the way we've always done it is a problem.”

**44 respondents' questioned the feasibility of the content of the course.** More than half of these respondents (25) were skeptical that such a course could help; 12 were specifically doubtful that a course could address the varying needs of arts organizations: –How are you going to make such a large topic pertinent to the diversity of arts organizations and how they function in their individual markets with their individual budgets and existing technology situations?” A group of similar responses (19) did show an interest in attending the course if the syllabus was specifically tailored to their organization's needs: –It would have to be focused on our size budget organization. Too small and it would be too basic. Too large and it would assume a larger staff than what we have.” A few (4) were willing to consider taking a course, but were hesitant to commit until they had more information.

**A smaller subset (23) explained that they did not need a course, and why. Respondents in this category ranged in size and budget,** such as one smaller organization that wrote, –We are a] small amateur [company] run almost exclusively by volunteers, many of whom are knowledgeable about the relatively low level technology needs we have.” On the other hand, organizations with budgets of \$1 million or more generally responded that they had found the expertise they needed either locally or internally.

**Although some of the case study organizations had noted on the survey that they would “definitely” benefit from a strategic technology planning course, they were more circumspect during the interviews.** Their reservations were similar to those expressed above, and included the **concern that the content of a course would not be specific enough to benefit**

**organizations at the individual level.** Companies had such a wide variety of needs, available resources, and previous technological knowledge that they thought it would be difficult to design a course that could address this diversity. One, for instance, said, “I participate in capital planning courses all the time and I find that most of them are generic, not specific to our needs. They’re feel-good programs so that you don’t have to fund individual programs.” Another agreed, “A challenge with this is that you get so many people at so many levels who know how to do different things.” A common dilemma among interviewees seemed to be that the idiosyncrasies of their individual software programs (particularly for tickets or donors) required different training. **This concern about specificity was supported by the number and variety of topics that case study interviewees suggested for the course—even those that supported the idea of attending a course had definite ideas about what they hoped to learn.** Potential ideas for the course ranged from social media to Microsoft Office. Other topics included learning to use online surveys for evaluation, security of networks, and how “to comply with the standards the payment card industry is putting down,” as one proposed.

**Opinions about the course differed depending on the size and budget of the case study organization, and the type of software they use.** A few felt they were unlikely to benefit from the course because they already had similar resources available to them (especially if they owned Tessitura, which provides its own training courses and a website with forums for discussion). One company, for instance, thought a course would be more useful to smaller arts entities, its representative saying, “Organizations our size have the resources and can reach out and talk to each other. It’s the small organizations that really need help.” However, the smallest organization interviewed hinted that its small, busy staff might actually be least likely to attend. “There’s not an hour in the day that someone would have [to go to a technology course],” the representative said.

Despite all the differences of opinion, **there was one area in which case study interviewees of various sizes and technological aptitude were in agreement: they would attend a course that emphasized new trends and cutting-edge ideas in the field, particularly social media.** While social media was mentioned most frequently, the interests in staying current went far beyond that. Interviewees would be more likely to spend time at a course if they could be assured of learning about the future of technology in their field. This attitude reflects the theme strongly expressed in the survey data that arts companies were worried about keeping abreast of developments in the rapidly changing and evolving technological world. For instance, one case study organization wanted to learn about “new trends in technology, not just for websites but for social networking too.” Others that were otherwise uninterested in going to a course would attend if, as one interviewee put it, the course focused on “where technology is going in terms of the field. Such as what else is out there that [is so new that] we don’t even know the questions to ask.” One staff member emphasized that the course would have to present “something you could only learn in this class” to be most worthwhile.

Attendees other than the ED (# 69). If respondents did not mark their executive director (or equivalent) as a potential attendee, they were asked in # 69 to explain why. (Respondents frequently were the ED equivalent.) **Many EDs (24), while supportive of a class, wanted to take best advantage by sending staff that were more likely to benefit.** Most delegated training to staff not because they were resistant; rather, there seemed to be a general

understanding of how technology could help when in the right hands. As one ED wrote, “As an ‘old dog’ I am strongly interested, but don’t have the chops. I’ll support the younger members of the team to get up operationally on that technology which is necessary.” These respondents emphasized that attending staff would report back; as one explained: “Too many things already on my plate—would look to other staff to become knowledgeable and rely on their recommendations.” Trust in staff’s abilities was implicit. **Others (18) were disinterested because technology was not a priority or had been delegated to other staff.** As one wrote, “[ED equivalent] focuses primarily on artistic and fundraising aspects of company,” implying that the course would not be relevant. Others listed positions such as managing director, financial director, and general manager as in charge of handling technology.

### Quantitative Survey Questions

Some survey questions asked respondents to provide more specific information about who they would send to the proposed strategic technology planning course, as well as when and with whom they would like the course to take place.

- When asked with what other types of organizations respondents would prefer to attend, there was almost an **even split with 39% preferring to attend a discipline-specific course and 40% desiring a multidisciplinary focus.** 21% expressed no preference (# 70).
- The majority of respondents felt that a course that was two full back-to-back days would work best for them (68%). 32% would prefer two full days a few weeks apart, and 19% chose four half days once a week for one month (# 71).
- When asked to check all who would attend a course, **85% marked executive director; about 60% marked marketing director and 50% development director.** Between 20% and 41% of respondents included other staff, such as: artistic directors, finance directors, operations directors, IT directors, production directors, box office staff, and board members (# 68).

### **Comparative Website**

During the case study interviews, organizations were presented with an idea for a new website that would contain both expert and user reviews of software programs that were relevant to the arts field, as well as a system to offer peer exchange for software users to share information about operating these programs. Case study participants were asked about their interest in and likelihood of using this hypothetical website. The purpose of this question was to begin to test the idea for developing a common information source that would not endorse one particular product or vendor, but instead provide comparative information about the choices available. Similar to (but of course smaller than) the cnet.com site, the hope would be to ultimately aid respondents by doing the advance research on software that they lack the time to do, and encourage the sharing of information.

**Most case study interviewees questioned if a website could be both broad, and specific enough to meet a variety of organizations’ needs, and if it would be more suitable to smaller organizations.** A website would have to be extremely comprehensive in order to be

useful to different kinds of organizations whose needs are ~~so~~ specific that it would be hard to imagine [others are] doing the same things we're doing." Companies that had Tessitura seemed satisfied with its online resources, with one representative saying, "They have a whole website that has forums . . . A number of us use it and our [database administrator] now is on it constantly." Another added that other companies might use existing comparative software resources: "You value other production managers' experience with the product in the field rather than a review. There are already online forums for this sort of thing. And I know that our staff already talks to other [organizations] of all sizes . . . to share info." Another interviewee agreed: "Tech support and the listserv and community support is for the tech you're using. If it already exists, you're not going to use a new site."

**The case study interviewees that were most interested in the comparative software website felt that its appeal would lie in its convenience, neutrality, and specific relevance to the arts field.** One representative, for instance, found many of the existing forums and online discussions frustrating because of their lack of official moderation, remembering a time when the RSS feed of one peer-driven forum was dominated by a discussion of light bulbs for days. One organization thought that it would be ~~highly~~ likely we'd use it. Like a cnet.com that would only concern us," adding that "I like that we can access it on our own time. We can search for it, read it, take what we need and leave what we don't. We're in charge of our experience based on what's relevant to us." A few who were interviewed mentioned it would be useful to have a website that featured reviews from the arts field and not from vendors. It ~~would~~ be a lot more neutral as opposed to someone who had an ax to grind," one representative said. However, one organization pointed out that in order to be most useful, a website would have to have enough reviews, like ~~the~~ Amazon of the arts world."

## Implications and Recommendations

As stated in the end of the Overview:

It appeared that arts organizations desperately wanted to stay current on their tech-related knowledge and expertise, so that they could use new technology. They realized that technology could play a role in improving their operations, particularly managing their information about audiences and donors. But they did not have the staffing and expertise to do so, nor did they have the funds. This affected the quality of their planning and decisions.

With that synopsis, and the findings in this report in mind, the following recommendations are made.

### Funding

**If funding is to be provided to organizations for technology, perhaps steps should be taken to increase the likelihood that plans will be implemented and systems will eventually be used well.** The following elements might be incorporated into any funding provided:

- a research phase so that the best systems are chosen;
- a process for vetting consultants and checking their references;
- a detailed budget, with anticipated additional costs that may arise during software migration, staff usage, and even the eventual customer requests that may result from having it;
- a plan that identifies roles for staff, board and/or consultants, including an internal staff person who will coordinate efforts;
- a mandatory training phase for select or all staff; and/or other such steps to safeguard against failure or non-usage; and
- a way to obtain assurances by senior staff that they will learn the software and use products.

Additionally, staff's own attitude seems to influence the use of, or resistance to technology, and perhaps a site visit or interview could assess the degree of internal support or resistance that would be encountered, prior to any funding decision.

**The sheer power of dollars to make purchases and implement plans should not be underestimated.** In lean economic times, when much of arts funding is project-driven rather than for infrastructure or operating costs, there is real value in having support to gain knowledge and implement tech plans as well as to purchase software and hardware.

### Building Knowledge and Shared Resources

**The arts field would benefit from strategies that are designed to increase knowledge and encourage sharing of information and expertise. Any such shared resources may help smaller and mid-sized organizations in particular.** Bearing in mind respondents' lack of time,

staffing, and expertise, establishing shared resources could help them avoid duplication of efforts and build an information base that is applicable to the arts field. Areas that could be addressed, for example, are advance research on hardware options and software programs; expertise to use these programs; and any related information. Several such options are as follows.

**The idea of a shared website is worthy of continued consideration, but should take into account the concerns and endorsements raised by the research.** Building expertise at using software was a considerable issue within this report. The findings suggest that arts organizations used a wide array of software and will continue to do so. Having a source of information to assist them in sorting through the array of choices and understand which products best meet their needs would be invaluable.

Interviewees were not altogether dismissive of the concept of a shared website to aggregate information about software products and usage. But they questioned to whom it would be tailored and how to best create a truly useful hub that would not duplicate other resources. It is crucial that any such resource not endorse one particular approach, product or vendor, but instead provide comparative information about the choices available. More research and consideration would be necessary in order to decide on a useful structure. Questions to address might include:

- What would be the primary target audience(s) for such a site? What is the likelihood that they would use it?
- What information should be offered, in order to be most useful and credible?
- What are the best ways to link arts practitioners who use the same software (other than Tessitura)? Would they log onto and converse on a website?
- What might be learned from the manner in which Tessitura offers its training and installation, and applied to the transference of knowledge about other software?
- Are other nonprofit fields grappling with the same need to transfer knowledge about software products? If so, how have they addressed this problem?
- How could a site capitalize on other forums that are already available through the arts service organizations, while avoiding duplicating those efforts?
- Who might host such a site and be responsible for keeping it up-to-date?

The site could include a listing of the most commonly used software products, with a comparative review of their features; blog so that peers could share questions and answers about using the software; and other such functions. Websites such as TechSoup and cnet.com could provide ideas for format.

**Regarding the new technology course, which is already being piloted by Mellon, the suggestions and concerns that are presented in the findings can be used to enhance the design.<sup>38</sup>** Briefly, the main areas are:

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<sup>38</sup> Relevant portions of the findings were shared with the designers of this course at NTEN, Idealware and NPower to inform their decisions about curriculum. As of the time of this writing, the course is being piloted and, per Mellon, will be evaluated before further implementation. Refer to the Postscript from Mellon for more information about the course.

- **Degree of specificity.** The pilot should accommodate respondents' reservations about the level of specificity that can be offered within one course, and its relevance to organizations that face a wide variety of circumstances and needs. A course that is general enough to apply to multiple organizations may not be specific enough to meet many of their needs. Their concern was raised, in part, by their thirst for knowledge about how to use software products, coupled with the disparity of systems they use for ticketing and donor management, as well as for accounting and websites.
- **The issue of integrated data management systems.** Respondents' constant cry was that not having integrated data systems results in duplication of efforts and increased costs. Moreover, one could sense the ineffable toll of frustration on staff's demeanor from not knowing how to migrate or operate systems. Conversely, when organizations have tailored systems, such as Tessitura, their training needs are likely to change and they may not be interested in attending a course at all. In the course, some acknowledgement or response to this should be made, if at all possible.
- **Social media.** There was near-unanimous interest in this area, including knowledge of any trends in technology that would allow organizations to keep current, while determining the best tools, strategies, and return on investment. There is clear potential for the course to meet these needs.
- **Tech Planning.** Within the curriculum, the topic of technological planning should bear in mind the ways in which arts organizations' planning practices cut across programs and job functions, along with the lack of foresight given to technology costs. This and other research from the full qualitative review indicate that organizations are planning somewhat for their technology use within their strategic plans, but not creating separate documents for this purpose. On the other hand, organizations are barely planning for the inevitable cost of replacing hardware until the last minute, as things break. They may be wary of attending a course that teaches planning if they could not afford to implement such plans. However, they may be convinced to plan more effectively to cover such costs, particularly if funding were available.

## Up-to-Date Research on Technology Usage

**Research should continue to be gathered on the arts field's technology-related issues at some regular interval, so that the stakeholders who are dedicated to serving that field can stay informed and craft meaningful responses.** As is often the case with research, this analysis has pointed out gaps in knowledge and implications for future data collection. Moreover, the breakneck speed at which technology is changing has implications for the manner in which arts organizations use it to create, market, and fund their work. These factors—the gaps in knowledge and rapid fire change underway—point to the pressing need for access to up-to-date information about the arts field's usage of, and needs related to, technology. While such research may go beyond Mellon's interest or responsibility, the need is nonetheless there.

Because such research will have a short shelf life, it would be ideal to establish an iterative and continued flow of feedback and information, so that the field as a whole can stay truly current on its needs. As evidence of the challenge of staying up-to-date, one need only to consider that in a survey conducted less than two years ago, respondents were not even using social media, which since then has become commonplace.

A shorter instrument could be developed, adding questions about areas such as the following:

- Software(s) used in management of data for ticketing, donors, and other purposes.
- Social media: levels of understanding and usage; success rates; strategies used (or lack thereof); any measures of return on investment and new techniques that are being tried.
- Clear breakdown of budget, staff size, volunteers, and performers.
- Titles and roles of staff individuals that share technological duties (to determine how tech duties are assigned and accomplished) and the degree to which these roles are changing.
- More information on how technology planning and strategies are developed within organizations.
- Any new trends in technological usage within organizations, such as new software or online platforms. For example, some arts entities are shifting to content management systems for their websites.
- Any shifts in, or progress made, in the barriers covered in this report, such as staff resistance to using technology, or access to knowledge about software products and their usage.

*To ensure a short feedback loop, it would be ideal to conduct a brief survey every one to two years, with an accelerated turnaround time for analysis.* The first such survey should be administered in late 2010 or early 2011, which would already mean a gap of between two and three years since the original 2008 survey. To avoid over sampling of the same members, perhaps service organizations could distribute it to half of their members every other year. Findings should be shared widely with the entire arts field. This would provide a valuable service not only to the funding world but to the discipline-based service organizations themselves, as well as their members.

Mellon may also opt to combine that research with some review of its own pilot course; this would allow any revisions to the course design to be informed by up-to-date feedback from the field at large about their technological needs.

## Postscript from The Andrew W. Mellon Foundation

Since 2008, the Mellon Foundation has targeted a portion of its funding to organizations working in areas that seek to address some of the challenges identified through the survey; this funding includes grants to:

- The dance company Misnomer to support the Audience Engagement Platform, intended to facilitate interactions between performing arts organizations, artists, and audiences. For more information go to <http://misnomer.org/aep>.
- Fractured Atlas to support ATHENA Tix, an open source ticketing system geared toward lightly institutionalized performing arts organizations. Fractured Atlas has plans to develop other ATHENA platforms, which would support the integration of data across the organization. For more information go to <http://www.fracturedatlas.org/site/technology/athena>.
- Corporate Council for the Arts to support planning related to Project Audience, the aim of which is to build collaborative, affordable, sustainable technologies to help arts service organizations to support activities and services that encourage involvement in arts and culture. For more information go to [www.projectaudience.org](http://www.projectaudience.org).

As a direct response to the original findings of the survey, the Foundation also made a grant to the Non-Profit Technology Enterprise Network (NTEN) to support the development and pilot of “The Art of Technology,” a course for nonprofit arts organizations, in collaboration with NPower and Idealware. The course is focused on three primary areas of interest and challenge:

- **Core Technologies:** Planning, budgeting, finding, and maintaining the technologies and IT support participants need to keep their organizations running smoothly—from software to business administration to systems networking to printers and other hardware.
- **Social Media:** Learning about new media solutions and making decisions about whether and how to deploy them, given the limited resources available to implement and maintain new technology resources across each organization.
- **Data Management:** Collecting, integrating, and using data (accounting, box office, development, Web site) to help participants understand their organizations and make decisions.

A beta version of "The Art of Technology" is currently being presented to an invited group of New York-based performing arts organizations over several months beginning in August 2010. It consists of three distinct parts: (1) an online curriculum overview and technology self-assessment; (2) a two-day on-site training session; and (3) a series of online seminars and conference calls over six months covering six topics to be determined based on the need of the course participants, and concluded with the submission of a strategic technology plan by each organization. The beta group consists of midsized organizations (identified as a target demographic in the survey), primarily in the disciplines of theater and dance. A small number of organizations from other disciplines and budget sizes were also invited and a group of service organizations, with whom the Foundation would hope to partner on future offerings of the course, were invited to observe and participate as well. Of the 72 organizations invited, 45 expressed interest, and 44 committed to participate based on availability on the date chosen for

the in-person training. By the end of the course, it is the goal that participants will be better able to understand and communicate to others how technology can help advance their organizations' missions, effectively research options and budget for technology, allocate limited resources for technology to the best ends given distinct organizational goals, and address pressing technology challenges facing their organizations now or in the future. For a fuller description of the course or to sign up to receive information on future offerings go to [www.nten.org/info-art-of-technology](http://www.nten.org/info-art-of-technology).

The course will be assessed once the pilot offering is complete in the fall; results from the assessment and future offerings of the course will be added to this report and included on NTEN's Web site upon availability.

## Company Profile and Bios

Callahan Consulting for the Arts helps artists, arts organizations and funders realize their vision through a range of services that include strategic planning, resource development, program evaluation, and philanthropic counsel. Founded by Suzanne Callahan in 1996, the firm has expanded over the past ten years to include strategic partnerships with senior consultants as well as freelance writer/administrators.

The firm has attracted a wide and growing client base of small to mid-sized arts ensembles, large institutions, presenting organizations, foundations, and national associations. Philanthropic clients include the Doris Duke Charitable Foundation, Chicago Community Trust, Kenan Institute for the Arts, The Andrew W. Mellon Foundation, and The Pew Charitable Trusts. Its national client base (most of which serve as re-grantors) includes Dance/USA, the Association of Performing Arts Presenters, the Society for Arts in Healthcare, and the National Performance Network. Among the company's New York clients have been: Dance Theater Workshop (for the New York State Dance Force), the Joyce Theater, Urban Bush Women, Gina Gibney Dance, and Nai-Ni Chen Dance Company. Its local client base includes the Washington Performing Arts Society, the Washington Ballet, Washington Shakespeare Company, and World Arts Focus. The budget size of 501(c)3 organizations served has varied from under \$100,000 to over \$6 million. (Philanthropic organizations are significantly larger.) Artistic disciplines have included dance of a wide variety of forms and styles, including ballet, modern, tap, African, Latin-influenced, Middle Eastern, and swing/lindy; contemporary, experimental and traditional theater; hip-hop; and orchestral, choral, chamber, gospel, and Latin music.

In the past decade, the firm has enjoyed growing recognition. Founder Suzanne Callahan is a regular trainer, college educator, panelist, and guest speaker. Published by the Association of Performing Arts Presenters, Callahan's book entitled *Singing Our Praises* was awarded Outstanding Publication of the Year from the American Evaluation Association for its contribution to the theory and practice of evaluation. She conceived of and produced the book *Dance from the Campus to the Real World: A Resource Guide for Faculty, Artists and Students*, published by Dance/USA. Both books are being used as college texts. She has also been published in the areas of fundraising, planning, and philanthropy. The firm was approved to join the consultant roster for the Upper Manhattan Empowerment Zone, which provides government funding for planning and capacity building to business enterprises in Harlem.

Callahan Consulting for the Arts offers its clients a wealth of experience in national policy and philanthropy; professional certification and documented success in fundraising; graduate-level training and trend-setting expertise in evaluation; and a thorough and effective approach to assessment and strategic planning. Most importantly, the firm prides itself on its impressive track record of accomplishment and concrete results in its key service areas, and the strong and trusting relationships that it has developed with its clients.

**Suzanne Callahan, CFRE, Founder.** Suzanne Callahan, CFRE, founded Callahan Consulting for the Arts in 1996. Callahan served as Senior Specialist for the Dance Program at the National Endowment for the Arts for nine years, where she was responsible for annual funding programs and technical assistance to artists and arts organizations. Also while at the NEA, she received a Distinguished Service Award for her leadership as Chair to the agency's AIDS Working Group and for her efforts to address the issue of health insurance for artists. She has served as panelist or site visitor for the Mid-Atlantic Arts Foundation, the New England Foundation for the Arts, the Heinz Endowments, the Rockefeller Foundation's US-Mexico Fund for Culture, The Pew Charitable Trusts' Dance Advance Program, the National Endowment for the Arts, and the Jack Kent Cooke Foundation. A Certified Fund Raising Executive based in Washington, DC, she has spoken and published for many national and local arts organizations and funders including Dance/USA, the National Performance Network, the Association of Performing Arts Presenters, Washington Regional Association of Grantmakers and the Association Foundation Group. A former dancer and dance teacher, Callahan holds a Master's Degree in Dance Education as well as a Certificate in Fundraising from George Washington University, where she was awarded a graduate teaching fellowship, and a Bachelor's Degree in Social Policy from Northwestern University. She completed post-graduate study in program evaluation and research methods at George Washington University.

**John Painter, Senior Consultant.** John Painter has a Ph. D. in Statistics and Evaluation and an M. Ed. in educational research methodology from University of Virginia as well as a B.S. in Psychology from James Madison University. He was formerly on the research faculty for the School of Social Work at UNC-Chapel Hill. He has served as analyst or principal investigator on numerous evaluation projects, including the North Carolina Court Improvement project and projects for the North Carolina Department of Social Services. He currently works as an Assessment Analyst at the Virginia Military Institute and as a private consultant.

**Barbara Russo, Client Associate.** Barbara Russo has worked with Callahan Consulting for almost three years in administration, research and planning. She was an associate in the management of Engaging Dance Audiences for Dance/USA. She received her degree in dance and psychology from Washington University in St. Louis. She has performed with Wyllyams/Henry Danse Theater, The Slaughter Project, Dance St. Louis' Contemporary Moves and is currently dancing with The Next Stage Project.

**Caitlin Servilio, Associate Writer.** Caitlin Servilio is a Masters' candidate in Library Science at Rutgers, and a graduate of American University in Washington, DC, where she obtained a degree in studio art. Her work has appeared at Longview Gallery in DC and Mayer Fine Art Gallery in Norfolk, Virginia. Over the past two years she has conducted qualitative analysis for Callahan Consulting for clients that include Dance/USA's Engaging Dance Audiences, Americans for the Arts' Hip Hop Mental Health Project Field Study, and the Covenant Foundation's evaluation of Liz Lerman Dance Exchange's *Small Dances About Big Ideas*.

**Shannon Seeger, Research Assistant.** Shannon Seeger is a recent graduate of the University of Maryland with a double degree in English and dance.

# Technology and the Performing Arts Field: Usage and Issues

## Appendices

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## Appendix A. Survey Instrument and Protocol

### Created by NPower

#### Survey Design and Protocol

The Andrew W. Mellon Foundation sought to learn where non-profits in the performing arts might benefit from advice or training or other forms of assistance with information technology. In particular, the survey described in this report was designed to advance the Foundation's understanding by investigating certain questions for the non-profit performing arts:

- Is planning for information technology linked to an organization's broader strategic planning?
- How do organizations manage their technology? On whom do they rely for technical advice and maintenance support? Are their practices sound?
- In what areas of technology do organizations see opportunities to thrive and grow?
- Are the organizations' attitudes about technology conducive to success and innovation, or do their attitudes hold them back?
- Might professional development in technology planning be valuable to them?

Content. Program officers from the Performing Arts Program of The Andrew W. Mellon Foundation collaborated with consultants from NPower to develop the content of the survey. Preliminary versions were shared with selected leaders in the non-profit sector of the performing arts, who gave advice on substance, format, and length. Sixteen executives from selected non-profit organizations completed a trial version of the survey (their organizations were also invited to submit the final version). The result of this process was a survey containing 72 questions, eight of which were open-ended. The questions were organized around six topics, in the following sequence:

1. Background information about the responding organization.
2. Strategic planning for the organization's future.
3. Managing the organization's technology.
4. Interest in particular technologies and planning methods.
5. Attitudes and perceptions about technology
6. Professional development in strategic technology planning.

Invitation Process and Collection of Responses. A letter from The Andrew W. Mellon Foundation to non-profit organizations in the performing arts explained the purpose of the survey and invited them to participate. Five associations graciously agreed to distribute this letter by email to their members located in the United States. Both the letter and the survey itself emphasized that responses were requested from the organization's "executive director or equivalent position." The email invitation provided a link to a website that offered two methods of responding:

1. Respondents were strongly encouraged to use an online survey available at [www.surveymonkey.com](http://www.surveymonkey.com).
2. A printable file could be downloaded, completed on paper, and sent by U.S. mail to NPower.

The email invitations were distributed August 18-21, 2008, followed by email reminders approximately weekly for three weeks. Acceptance of responses ended on September 21, 2008.

Confidentiality. Nothing in the survey asked the respondents to identify themselves or their organization by name. However, the survey asked for the following identifying information, from which the organization's name could be deduced in most cases: U.S. Employer Identification Number (EIN), ZIP code, year founded, and association memberships. NPower collected all the surveys and used the identifying information to name the organizations, where possible. As an isolated list, NPower gave the names of the responding organizations and their association memberships to the Foundation and to association executives. The associations used these lists to send reminders to their members who had not yet responded. The linkage between an organization's identity and its responses were held privately by NPower and never shared with the Foundation or the participating associations.

## Instrument

*This instrument was written by staff from NPower with input from The Andrew W. Mellon Foundation and the five service organizations who helped distribute it to their members.*

To ensure the privacy of your responses, while enabling us to assure the quality of our findings, we ask that you provide your organization's Employer Identification Number (EIN, as reported on tax forms) in the space below. We will separate your EIN from the rest of the survey, before recording your responses.

1. Your EIN:   –

***Tell us about your organization and your role.***

3. To which of the following associations does your organization currently belong? Mark all that apply.

- Association of Performing Arts Presenters
- Dance/USA
- League of American Orchestras
- OPERA America
- Theater Communications Group

4. What is your organization's ZIP code?

5. In what year was your organization founded?

For each question below, mark the **one** answer that fits best.

6. What is your title?

- (a) Executive Director
- (b) CEO
- (c) General Director
- (d) Managing Director
- (e) Producing Director
- (f) Other – Please specify: \_\_\_\_\_

7. How long have you been in this role?
  - (a) Less than 1 year
  - (b) 1-4 years
  - (c) 5-9 years
  - (d) 10 years or more
  
8. For the most recently completed fiscal year, what was your organization's annual revenue from all sources?
  - (a) Under \$250,000
  - (b) \$250,000 - \$499,999
  - (c) \$500,000 - \$999,999
  - (d) \$1 - 2.9 million
  - (e) \$3 - 5.9 million
  - (f) \$6 - \$9.9 million
  - (g) \$10 - \$19.9 million
  - (h) \$20 - \$49.9 million
  - (i) Over \$50 million
  
9. How many full-time-equivalent staff (FTEs) does your organization employ? (FTE means that a half-time employee counts as ½ person, etc.)
  - (a) 10 or fewer
  - (b) 11-20
  - (c) 21-50
  - (d) More than 50
  
10. Approximately what percentage of your organization's work do volunteers perform?
  - (a) Less than 10%
  - (b) 10-25%
  - (c) 26-50%
  - (d) More than 50%

**Appendix A. Survey Instrument and Protocol (Created by NPower)*****How does your organization plan for its future?***

In the following questions, —Strategic Plan” means written documentation of your organization's principles and processes for defining its long-range direction and making decisions on resource allocations (capital, people, space, etc.) to pursue this direction.

11. When did your organization most recently complete a formal Strategic Plan?

- (a) We have no Strategic Plan. ▶▶ If you mark this answer, please skip to Question 13.
- (b) Within the past 12 months
- (c) 1-3 years ago
- (d) More than 3 years ago

Next, mark all that apply.

12. Which stakeholders participated in developing your Strategic Plan?

- Administration
- Artistic/Creative
- Board of Advisors
- Board of Directors
- Box Office/Front of House
- Development/Fund-Raising
- Donors
- Executive Director (Self or Prior Leadership)
- Finance
- General Public/Members
- Human Resources
- Information Technology
- Marketing
- Outside Consultants
- Production
- Don't know
- Other – Please specify: \_\_\_\_\_

13. Does your Strategic Plan include any of the following?

- A budget detailing the annual incremental costs of implementing elements of the plan that are beyond current operations
- An economic strategy to support the goals outlined in the strategic plan (i.e., a strategy for developing the earned or unearned revenues required to support your plan)
- An operating *pro forma* projecting annual operating income and expenses for the period of the plan
- Other detailed financial projections included in your plan – Please specify: \_\_\_\_\_

In the next two questions, “plans” includes any formal plans, including a Strategic Plan, or other plans that may be narrower in focus or shorter in duration.

14. Has your organization developed written plans for any of the following within the past two years?

- Audience/Membership Development
- Creative/Artistic Direction
- Development/Fund-Raising
- Marketing/Branding
- Information Technology/New Media Growth
- None of these
- Other – Please specify: \_\_\_\_\_

**Next, mark the one answer that fits best.**

15. How would you rate your organization’s historic ability to develop and implement plans?

- (a) Excellent: We have developed plans that are achievable and have achieved most plans.
- (b) Good: We generally achieve the critical elements of our critical plans, though occasionally we develop plans that are out of reach or fail to reach some goals.
- (c) Fair: We achieve some critical elements, but often find that we are unable to implement our plans fully.
- (d) Poor: We seem to have great difficulty developing plans or following through and implementing them.

**Appendix A. Survey Instrument and Protocol (Created by NPower)*****How does your organization manage your technology?***

For the following questions, please construe “technology” and “information technology” to include, e.g., computers, databases, websites, audio and video media, software, hardware, and relevant services and suppliers, as used by your organization in the past five years.

16. Has your organization’s Board of Directors or Advisory Board been involved in your technology planning, oversight, or critical decision-making?
- (a) Yes, we have an individual board member who advises us on technology issues.
  - (b) Yes, we have a standing technology committee on the board of directors.
  - (c) Yes, there is a technology committee made up primarily of advisory board members.
  - (d) No, but we want this.
  - (e) We have no interest in this.
  - (f) Don’t know
17. Has your organization’s budget provided for replacements and upgrades of software, computers, and other technical equipment every 3-5 years?
- (a) Yes
  - (b) No
  - (c) Don’t know
18. Has your organization’s annual budget provided technology training for your staff?
- (a) Yes
  - (b) No
  - (c) Don’t know
19. What best describes the way your organization has made technology decisions?
- (a) Individual Decisions – People purchased the technology they needed, if funds were available.
  - (b) Departmental Decisions – Each department or area had its own technology budget and used it to meet departmental needs.
  - (c) Executive Decisions – Technology decisions were made by a person or select group of people in upper management.
  - (d) Collaborative Decisions – Technology decisions derived from a plan that all departments or areas helped to develop.

Has your organization experienced any of the following barriers to effective adoption and use of new information technologies in the past five years? Mark the response that best represents your organization's experience.

	<b>A Major Barrier</b>	<b>A Barrier</b>	<b>A Minor Barrier</b>	<b>Not a Barrier</b>
20. Lack of money	( )	( )	( )	( )
21. Lack of time	( )	( )	( )	( )
22. Insufficient knowledge to make decisions	( )	( )	( )	( )
23. Resistance or disinterest from the Board of Trustees	( )	( )	( )	( )
24. Resistance or disinterest from the leadership of the organization	( )	( )	( )	( )
25. Resistance or disinterest from patrons, members, or other constituencies	( )	( )	( )	( )

26. If there were other barriers, please describe them.

**Next, mark all that apply.**

27. Where has your organization sought expert advice on information technology?

- IT professionals on staff
- Staff members who are not IT professionals (accidental techies)
- Professional IT consultants (either paid or pro bono)
- Vendors
- Local computer or electronics store
- Volunteers (people who donate tech advice but are not professional IT consultants)
- Board member(s) with expertise in information technology
- Peers in other arts organizations
- A service group or association to which your organization belongs
- IT websites for non-profits, such as www.techsoup.org or www.idealware.org
- Other \_\_\_\_\_
- None of these

**Appendix A. Survey Instrument and Protocol (Created by NPower)**

28. Who has provided day-to-day technical support in your organization?

- Technology staff (technology support is their primary job)
- Other staff (technology support is not their primary job)
- Contracted service providers (including vendor-provided telephone support)
- Local computer or electronics store
- Volunteers
- Nobody
- Other – Please specify: \_\_\_\_\_

**Next, mark the one answer that fits best.**

29. Has your organization normally found the knowledge and support it needed for good decision making around information technology?

- (a) Always
- (b) Most of the time
- (c) Sometimes
- (d) Rarely
- (e) Never

30. Overall, how would you describe your organization's current technology?

- (a) State of the art (an early adopter of new information technologies and far ahead of most organizations in your field)
- (b) State of the market (keeping pace with institutions that are considered tech leaders in your field)
- (c) Serviceable (satisfying your customers and internal users)
- (d) Antiquated or otherwise inadequate
- (e) Non-existent

31. Has your organization applied for a technology grant in the past five years?

- (a) Yes
- (b) No
- (c) Don't know

**Appendix A. Survey Instrument and Protocol (Created by NPower)**

32. Briefly describe a significant project to improve or upgrade some aspect of your organization's information technology within the past five years.

▶▶ If you have had no such experiences, please write "none" and skip to question 34.

33. In executing the project you just described, what worked well? What needed improvement?

34. Overall, how would you assess your organization's experience with this project?

- (a) Successful
- (b) Mixed
- (c) Unsuccessful

**Appendix A. Survey Instrument and Protocol (Created by NPower)****What technologies might help your organization?**

Following are some statements about ways in which organizations in the performing arts might want to use technology. For each of these, mark the response which best represents your organization's situation:

**Yes:** We are doing this to our satisfaction.

**Some:** We are doing this, but not yet as fully or effectively as we envision.

**Aspire:** We are not doing this currently, but this is a goal for us.

**NA:** We have little or no interest in doing this.

	<b>Yes</b>	<b>Some</b>	<b>Aspire</b>	<b>NA</b>
35. <b>Online sales:</b> Your organization uses online tools to sell tickets.	( )	( )	( )	( )
36. <b>Online donations:</b> Your organization uses online tools to accept donations.	( )	( )	( )	( )
37. <b>Online advertising:</b> Your organization uses online tools to advertise performances.	( )	( )	( )	( )
38. <b>Web presence:</b> You have the staff, the tools, and the support (in-house or by contract) necessary to update your organization's website effectively.	( )	( )	( )	( )
39. <b>Social networking:</b> Your organization has an online web-presence that creates a social-networking community for your audience members.	( )	( )	( )	( )
40. <b>Donor data:</b> Your organization actively manages detailed information about your donors, on multiple dimensions (demographics, solicitations, donation history, patronage, attendance at fundraising events, personal interests, etc.).	( )	( )	( )	( )
41. <b>Audience data:</b> Your organization actively manages detailed information about your members or ticket purchasers on multiple dimensions (demographics, single ticket and subscription purchase history, attendance at other organization events, personal interests, etc.).	( )	( )	( )	( )
42. <b>Data integration:</b> Your organization has a unified ticketing and donor development system or the separate systems you use to track ticket purchases/admissions and donors are easily integrated.	( )	( )	( )	( )
43. <b>Patron growth:</b> Your organization uses technology to reach and develop new patrons.	( )	( )	( )	( )
44. <b>Patron retention:</b> Your organization uses technology to retain and develop existing patrons.	( )	( )	( )	( )
45. <b>Performance:</b> Your organization employs state-of-the-market performance-related production technologies.	( )	( )	( )	( )
46. <b>Finance and administration:</b> Your organization's financial and other administrative systems are integrated (e.g., your box office and accounting systems are easily reconciled).	( )	( )	( )	( )
47. <b>Technology planning:</b> Every department or area in your organization contributes to planning for new technology initiatives.	( )	( )	( )	( )
48. <b>Innovation:</b> Your organization keeps current with new technology, regularly seeking to improve how you use technology for your audiences, donors, funders, and staff.	( )	( )	( )	( )

	Yes	Some	Aspire	NA
49. <b>Needs of Staff:</b> Everyone in your organization has the information technology support (hardware, software, training, and service) needed to work effectively.	( )	( )	( )	( )

***How is technology viewed in your organization?***

Mark the response that best represents the degree to which you agree or disagree with the following statements.

	Strongly Agree	Agree Somewhat	Disagree Somewhat	Strongly Disagree
50. Making strategic investments in information technology innovation can help your organization achieve its mission.	( )	( )	( )	( )
51. Your organization's use of information technology has little or no impact on how your audience views your organization.	( )	( )	( )	( )
52. Information technology is essential for staff in your organization to do their jobs.	( )	( )	( )	( )
53. Your organization avoids investments in new technologies because it lacks the information, expertise, or clarity necessary to make decisions.	( )	( )	( )	( )
54. The executive leadership of the organization has a clear vision for how technology supports the organization and advances its mission.	( )	( )	( )	( )
55. Staff are unwilling or unable to adopt new information technology.	( )	( )	( )	( )
56. The Board endorses investments in new information technology.	( )	( )	( )	( )
57. There are leaders, staff, or board members who feel that investments in technology take away resources from the organization's core mission.	( )	( )	( )	( )
58. Your organization has had negative experiences recently with investments in new technologies.	( )	( )	( )	( )
59. As an executive leader, you feel confident in your ability to promote and encourage appropriate uses of technology.	( )	( )	( )	( )
60. Funding for technology investments is available and attainable.	( )	( )	( )	( )

61. What would you say are the most pressing technology issues facing your organization at this point in time?

62. What would you say are the most pressing non technology-related issues facing your organization at this point in time?

***Tell us about professional development.***

What is your capacity to take advantage of professional development opportunities and your interest in professional development in technology-related areas?

63. Do you currently have a line item in your annual operating budget for professional development?

- (a) Yes, and it is sufficient to cover our professional development needs
- (b) Yes, but it is insufficient to cover our professional development needs
- (c) No
- (d) Don't Know

64. In which of the following areas have you pursued one-day or multi-day (6 hours minimum) professional development opportunities for yourself, your board, or your senior staff? Mark all that apply.

- Technology
- Management
- Fundraising
- Marketing
- Public Relations
- Community Relations
- Governance
- Operations
- Human Resources
- Accounting/Finance
- Audience Development
- Arts in Education
- Strategic Planning
- Other (please list): \_\_\_\_\_
- None - we pursued no professional development opportunities

65. If you checked any boxes aside from "None," did you personally or your organization pay a fee to participate in these opportunities?

- (a) Yes in every case
- (b) Generally yes
- (c) Generally no
- (d) No in every case

66. If you checked “Technology,” please list the types of courses or seminars that were taken:

67. Would a course in strategic technology planning, featuring content specifically designed for performing arts organizations, be useful to your organization? Assume that such a course would be intended to help your organization make effective short- and long-term decisions with regard to information technology investments and deployments, and specifically in support of your organization’s mission, overall strategy, and long-term goals.

- (a) Definitely Yes
- (b) Probably Yes
- (c) Uncertain
- (d) Probably Not
- (e) Definitely Not

68. If you are uncertain or negative about a course on strategic technology planning, help us understand your reservations.

69. If such a course were offered, who from your organization would benefit from attending?

**Mark all that apply.**

- Executive Director (or equivalent)
- Artistic Director (or equivalent)
- Finance Director (or equivalent)
- Operations or Administrative Director (or equivalent)
- Marketing Director (or equivalent)
- IT Director (or equivalent)
- Development Director (or equivalent)
- Production Director/Technical Director (or equivalent)
- Box Office / Front of House Manager (or equivalent)
- Board Member (s)
- Other – List as many positions as you wish: \_\_\_\_\_

70. If you did **not** check “Executive Director (or equivalent),” please help us understand your response:

71. With what other types of organizations would you find it most helpful to take this course?

- (a) Discipline-Specific: Arts organizations in your discipline or field only

**Appendix A. Survey Instrument and Protocol (Created by NPower)**

- (b) Multidisciplinary: Arts organizations in your discipline and in other disciplines
- (c) No Preference

72. For a course on strategic technology planning, which of the following schedules would work best for your organization?

**Please pick your top two choices.**

- Two full days (back-to back)
- Two full days (a few weeks apart)
- Four half days (once a week for one month)
- Eight two-hour sessions (twice a week for one month)
- Eight two-hour sessions (once a week for two months)

73. If you needed to seek input from staff members in order to answer certain questions in this survey, please list the title(s) of the person(s) you consulted:

***Thank You!***

## Appendix B. Excerpts from Report on Representativeness of Data

Submitted to the  
**The Andrew Mellon Foundation**  
 By  
 Suzanne Callahan, Founder  
 Michael Benediktsson, Statistical Consultant  
 Barbara Russo, Client Associate

In order to assess the representativeness of the survey, the consultants compared survey respondents<sup>39</sup> to evidence from three sources:

- **Service Organization Membership Data:** Membership lists and statistics were collected from the five service organizations represented in the study. All five groups provided data on the revenue or expenses, geographic location and organizational age of their non-profit member organizations, information that was used to compare the survey's respondents to the broader population of organizations they represent.
- **National Center for Charitable Statistics (NCCS):** In order to compare service organization members with an even broader population of non-profit organizations devoted to performing arts, data were collected from the National Center for Charitable Statistics, which maintains a wide range of data on non-profit organizations. NCCS classifies organizations by their substantive focus, so comparison data were available for non-profits devoted to dance, theater, symphony orchestra, opera, and performing arts presenting.<sup>40</sup>
- **In-depth Interviews with Service Organization Staff:** Quantitative data from the above sources was supplemented with evidence drawn from qualitative interviews. In these meetings, the list of survey respondents was reviewed by the leadership of the five service organizations, who offered assessments of the representativeness of the list with regard to their broader membership, and of their membership to the field.

### Methodology

This analysis probed for explicit and implicit signs that the survey sample represents a skewed depiction of the broader performing arts field. First, the consultants examined the survey data itself, looking at the response rate and the range and distribution of key variables to see if there were any overt signs that the sample was biased toward, say, large organizations or those representing a certain region of the country. Then, following standard procedures for assessing representativeness, survey respondents were compared to the best data available on the broader population ostensibly represented (this is where the service organization membership and NCCS data comes in). Finally, the qualitative interviews with service organization staff were conducted, in part, to learn whether the leadership of the five disciplines corroborated the quantitative findings. In almost every instance, they did, supporting five conclusions concerning the representativeness of the study.

<sup>39</sup> Preparing these lists involved locating the popular names for most of the 594 respondents, which was completed by research assistants. Having these names sheds light on the breadth of responses in a manner that the legal names does not. This step was taken out of concern that all service organization leaders may not know the legal names of all members, and this observation proved to be accurate.

<sup>40</sup> NCCS includes separate categories (~~N~~TEE classifications<sup>39</sup>) for organizations devoted to ~~theater~~, ~~symphony orchestras~~, ~~opera~~, ~~dance~~ and ~~ballet~~. The ~~dance~~ and ~~ballet~~ categories were combined to provide comparison data representing the dance field. The NCCS category used to represent ~~presenters~~ was A61: Performing Arts Centers, defined as ~~organizations that operate facilities including theaters for the performing arts,~~ including ~~organizations whose main activity is presenting touring performing arts productions to the public~~ but excluding organizations that perform and produce their own work.

**Appendix B. Excerpts from Representativeness Report****Conclusion 1:** The survey sample is generally representative.

The sampling population for the study consisted of *all* non-profit members of the five largest membership organizations representing dance, opera, orchestras, theater and performing arts presenting organizations. The service organizations in question are either the only, or the largest, such entities representing their respective areas, and thus provide the broadest possible sampling population for a survey of this kind. Unsurprisingly, interviews with service organization staff generally supported this impression.

The response rate for the survey was 42%, which is perfectly acceptable, even by the strict standards of academic studies devoted to management or organizational science.

When scanning for response bias, the standard approach is first examining the data for signs that a subgroup of member organizations were more likely than others to respond to the survey. This process began by examining the survey data (summarized in the NPower report) to assess the scope of organizations represented. Generally, the variety of survey respondents in terms of revenue, staffing and longevity suggest that a broad population of organizations is represented in the study:

- **Revenue:** *The study includes organizations with annual revenue ranging from under \$250,000 to more than \$50 million, with a statistically “normal” (i.e. bell-shaped) distribution among the intervening revenue categories, even when further broken down by discipline. The sample captures a wide variety of organizations in budgetary terms.*
- **Staffing:** *Although organizations with low staffing levels account for half of the sample, the study includes organizations ranging from fewer than 10 staff members to more than 50.*
- **Longevity:** *The sample includes organizations founded as early as 1809, as well as extremely young organizations with only a few years of experience. More than 100 organizations are represented that were more than 50 years old at the time of the study. More than 100 organizations are represented that were less than 20 years old.*
- **Location:** *As noted from NPower, there was at least one response from every state, and the number of responses per state roughly match the relative size of each state’s population.*

**Conclusion 2:** Some disciplines are more represented in survey.

One insight this analysis uncovered is the distribution of survey respondents among the disciplines, and more intriguing, the different response rates by discipline. As the graphic in the Overview to the report indicate, *more than two-thirds of the sample (and thus more than two-thirds of its results) represent the experiences and attitudes of theater companies and orchestras.* Dance companies, opera companies and presenters (defined by primary membership) compose far less of the sample. Meanwhile, *opera companies and dance companies were far more likely to respond to the survey than presenters, with theater companies and orchestras falling in between.* It is difficult to speculate about the differences between the disciplines in response rate.

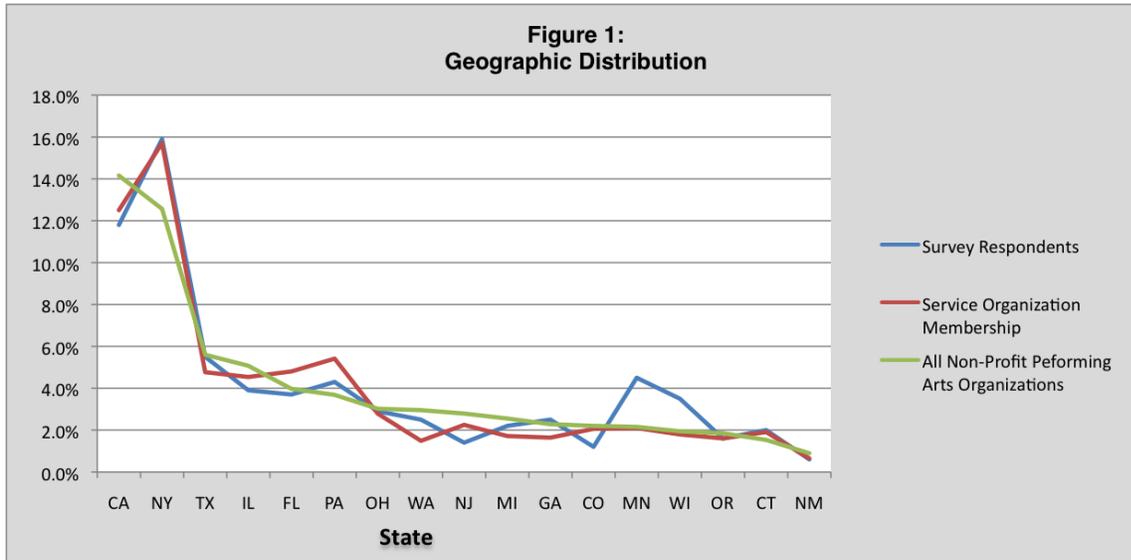
**Conclusion 3:** Geographic coverage is particularly good.

A three-way comparison of geographic distribution was drawn among a) survey respondents, b) service organization membership<sup>41</sup> and c) data on all non-profits devoted to the performing arts in question from the NCCS. Figure 1 shows the distribution among the 17 states with the largest population of performing arts organizations, according to

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<sup>41</sup> Full member lists listing location by state were available for every service organization except for Dance/USA, which provided a partial breakdown including 10 of the 17 states represented above. (The remaining states contained on average, less than one Dance/USA member organization each, so obtaining a full membership list from Dance/USA would not have visibly changed the chart.)

the NCCS data. The distribution of the survey respondents is very much in line with the broader population, with a slight overrepresentation of a pair of Midwestern states, Minnesota and Wisconsin.



This conclusion was bolstered by interviews with service organizations, which repeatedly emphasized the even geographic dispersion of the survey respondents, overall—with a few exceptions. TCG’s director, for example, noted “good geographical representation” and a particularly “good representation of New York theaters, the West Coast, and the Midwest.” Several caveats in qualitative interviews were voiced about presenters: One was made by Sandra Gibson, the Executive Director of APAP, who noted slightly less coverage of presenters in New England and the South. The other minor note was offered by Dance/USA staff, whose presenting membership favors the east coast and California but is broadly representative across the nation, when compared to the Mellon data of dance presenters, which skews toward the east coast and California.

**Conclusion 4:** Mid-Sized organizations are more represented than small or large ones.

In general, both statistics and interviews suggest that the coverage in terms of size is extensive, and roughly matches the membership of the service organizations.

At the same time, both statistics and interviews suggested that in relation to the broader field, *organizations with mid-sized budgets (\$1-\$6 million) were more likely to be represented.* This conclusion was drawn after talking to the service organizations and analyzing the budget figures for the survey respondents alongside the service organization membership (separately by discipline) and revenue data from NCCS on the broader performing arts community.<sup>42</sup>

Mid-sized organizations are more likely to be members. This bias was partially due to the types of non-profits more likely to be members of the service organizations, which tend to include larger, more established companies with relatively heavy investments in presenting and producing, excluding, as one director put it, less institutionalized avocational organizations or amateur companies.

<sup>42</sup> Three of the service organizations (Dance/USA, LAO and APAP) were only able to provide data on the annual expenses of members. After analyzing tax data from a random sample of comparable non-profits (from NCCS), and calculating their revenue-to-expenses ratio, it was apparent that the average ratio is 1-1, meaning that the annual expenses of these non-profits are a good proxy for revenue. Based on this judgment, expenses were substituted for revenue levels for these service organization members.

**Appendix B. Excerpts from Representativeness Report**

Among invited organizations, mid-sized and large organizations are more likely to respond. There are further indications that mid-sized and some large organizations had a higher response rate. Dance/USA estimated that the survey captured 82% of their larger company membership, but only 13% of its membership under \$200,000. Similarly, even though LAO's membership includes more small orchestras than large orchestras, the smaller orchestras were thought by staff to be less well represented by the survey. Orchestras that responded to the survey included 75% of LAO members with budgets of \$14-15 million and up. The smaller budget categories were less well represented because, according to staff, "there are so many of those [smaller ones]."

Most well represented in the survey are mid-sized organizations, with annual revenue between \$1 million and \$6 million. In contrast, organizations with \$2 million budgets have technology issues that they are actively working to solve, and thus may have been more interested in responding.

**Conclusion 5: Responding Organizations Slightly Older than Non-Respondents.**

Finally, this analysis suggests that among the membership of the service organizations, slightly older-than-average organizations were more likely to respond. This may, again, offer a lead in terms of which companies are most interested in improving their technological capabilities. A basic analysis of the survey data show organizational age to be strongly correlated with size (in terms of revenue), so the tendency of older-than-average organizations to respond could simply be a side effect of the sample's bias toward mid-sized and larger organizations. However, along this same line of reasoning, it does perhaps provide further evidence that more established organizations may be those most interested in improving their technological planning and management.

*The full report on representativeness is available upon request to Callahan Consulting for the Arts.*

## Appendix C. Respondent Membership by State

State	Total per State	Membership(s):					TCG	None
		APAP	D/USA	LAO	OPERA			
AK	2			1			1	
AL	2			1	1			
AR	3			2			1	
AZ	9	2		2	1		4	
CA	67	13	15	18	9		21	
CO	10		1	6	2		1	
CT	13	2		6			5	
DC	5	2	1	1			4	
DE	2			1			1	
FL	24	4	1	12	4		4	
GA	1						1	
HI	2						1	1
IA	8			7	1			
ID	4	1	1	1	1		1	
IL	24	2	1	11	2		9	
IN	9	1	1	6			2	1
KS	1						1	
KY	8		1	1	1		5	
LA	5	1		3	1			
MA	19			8	2		8	1
MD	12	1	1	5	2		4	
ME	2			1			1	
MI	12		1	9			1	1
MN	24	3	2	5	1		14	
MO	10	1	1	3	2		3	
MS	3	1		1	1		1	
MT	3			3				
NC	8		1	5	1		1	
ND	4			3	1			
NE	2			1	1			
NH	1	1					1	
NJ	9	1		5			3	
NM	4			3	1			
NV	5		1	4				
NY	86	18	22	17	7		38	
OH	19	5	1	8	3		4	
OK	6	1	1	3	2			
OR	9	1	1	4	1		3	
PA	27	2	3	13			10	
RI	4						3	1
SC	25	2		12	1		11	1
SD	1			1				
TN	9	1	1	5	2		1	
TX	34	6	4	12	6		8	
UT	3			2	1		1	
VA	11	2	2	2	3		3	
VT	3			1			2	
WA	15	4	1	6	1		4	
WI	17		2	7	1		7	
WV	4	1		3				
WY	3	1		2				

## Appendix D. Qualitative Questions: Summaries of Findings

The methodology used for this content analysis was explained in the introduction. Responses were reviewed carefully for the key themes that were present in each one, and assigned a code for each of those themes (each theme was assigned a unique code). Therefore, each response could be assigned one or multiple codes based on their breadth and complexity. This means that generally there are more codes than responses. The process of coding allows researchers to note the disparate ways in which people express themselves yet track the frequency of themes that occur in the data.

### **Survey Question 25 (72 respondents and 110 codes)**

Question as it appears in the survey:

*In questions 19-24, respondents were asked to rate how much certain barriers to technology use affected their organization, including: lack of money, time or information; and resistance from leadership, the Board of Directors, or patrons themselves. In question 25, respondents were asked: “If there were other barriers, please describe them.”*

### Summary

**Despite having already classified the obstacles in questions 19-24, several respondents repeated these sentiments in their open-ended answer to question 25.** These basic resources were often inextricably tied to one another, as indicated by this comment: —Major barriers to adopting new technologies are the time it takes to research and implement new technologies coupled with the need for specific fundraising efforts to acquire the technology.” This respondent was one of many who seemed to clearly recognize barriers and the complexity of tech solutions.

**Staff** (27, or 38% of responses) **and Time** (20, or 28% of responses)

(Together staff and time comprise 46% of codes.)

**About one third were concerned that staff’s size, usable hours, and technical expertise were inadequate to maintain technology projects. 13 needed either IT or more general staff to augment existing staff who were already spread too thin to maintain or learn about technology.** Those that desired IT staff seemed most concerned about having technological expertise readily at hand: —Consistent IT resources who understand both our staff/organization needs AND available technology. Training—accessible & knowledgeable individuals to share their expertise.” **Respondents who sensed staff resistance (8) were specific and frustrated,** such as one who fired a particularly resistant marketing director. Others described —Luddites” on staff who were comfortable with old systems and reluctant to implement and learn new ones.

Just a few (9) reported **leaders who were inconsistent, insufficient or disinterested as a barrier towards adopting technology.** Upheaval in technology plans could result from shifts within the board or staff when, —because of turnover, many decisions regarding technology are not tied to an overall strategy.”

**Lack of time was seen as a barrier both in acquiring technology as well as maintaining it (13).** Among the concerns were lack of time for research, training, and acquiring funds. **As resources dwindled, a few (7) respondents were forced to push technology further down their list of priorities, favoring instead other goals and issues that align with their missions.** One had technology as a —fine item put in [the] budget for the last 3 years, but each year other pressing needs superseded.” Another offered up the main cause of their problem: —The economy has truly put an end to IT upgrades. It IS important, but cannot be justified when compared to paying a higher per service rate for musicians or getting another ensemble to a school.” Another respondent agreed: —Aspects of fulfilling our mission take much higher priority.”

**Funding** (22, or 31% of responses and 20% of codes)

**Funding was the bottom line for many:** –Money is the big issue. We know what we want and need, just don't have the financial resources.” Others specifically listed ways in which they would use these funds if they had them, such as staff salaries, IT help, or new software.

**Knowledge** (11, or 15% of responses and 14% of codes)

Some respondents felt they had **inadequate information and research time in order to make effective technological decisions.** As one reported, –Greatest issue was finding the right answer –All [were] expensive. All organizations seem to eventually dislike their software/databases, etc.” **Organizations wanted information and expertise in order to choose the technology that would best serve them, as well as to learn how to use these systems efficiently.**

**Other Responses** (21, or 29% of responses and 20% of codes)

Other respondents cited barriers that were so different and specific that they could not fit in the above categories. There were concerns about location, data security, website-related problems, and hardware and software issues, among others.

### Survey Questions 31-33

Questions as they appear in the survey:

**Briefly describe a significant project to improve or upgrade some aspect of your organization's information technology within the past five years.** (# 31 with 541 responses and 1,057 codes).

**In executing the project you just described, what worked well? What needed improvement?** (# 32 with 414 responses and 805 codes)

**Overall, how would you assess your organization's experience with this project?** (# 33 with 435 responses)

### Summary

Questions 31 through 33 asked survey respondents to describe a recent technology project (# 31), explain what went well with this project and what did not (# 32), and rate the success of their experience (# 33). As these questions were reviewed, it became clear that respondents' ratings did not always match their descriptions of the experience: 278 rated their experience as –successful”, while a majority of these described their experiences as mixed or even negative. To illustrate the inconsistencies, Callahan Consulting assigned a new set of ratings based on the descriptions. This allowed for the data to be analyzed based on content, rather than rating, which helped clarify what truly worked through these projects and what did not. (The disparity between ratings and comments might be because after installation, organizations were able to at least partially use systems, and thus counted even difficult projects as successes.) *Note that all numbers below refer to the number of responses rather than the number of codes.*

**Project size and scope varied widely** from major software changes in ticketing and donor systems, to installing new computer systems, to ongoing upgrades. Some considered a tech –project” to be something as simple as using Google Calendar. Projects frequently revolved around software (218, 38 of which concerned Tessitura), hardware (103), and websites (93); these were generally described in vague terms such as –upgrade,” –redesign,” and –aw.” Software specifics included ticketing, donor, and financial systems; hardware was most often computers and servers. A minority of tech projects included building networks (30), creating tech plans (7), and installing phone systems (2), among other items.

**Respondents who described successful projects (114) were generally vague about what worked.** Many merely said that projects –worked well,” with little or no description of how. However, this lack of detail may not imply lack of satisfaction. These comments generally referred to the installation rather than the usage of the program or equipment.

Conversely, respondents who described unsuccessful (39) or mixed projects (196) were generally specific and frustrated.<sup>43</sup>

### Staffing

**Project outcomes were frequently tied back to the human element.** What did and didn't work had everything to do with *who* was involved, whether it was in planning, implementing, maintaining, or advising. **Staffing was the most frequently cited element in success or failure (220 responses).** Interestingly there was a close divide between staff-related factors that attributed to projects' success (94) and those that were blamed for their failure (117).

#### *What Didn't Work*

**The lack of internal or dedicated IT staff hindered adaptation of technology (33).** Amidst their other priorities, staff lacked the sheer hours in the day, or tech duties in the job description, to complete technology projects. Commonly this shortcoming was stated merely as "limited staff," without much elaboration beyond the desires for more availability and more help with performing ongoing tech maintenance. One commented, "We desperately needed more IT resources in-house." Sometimes staff limitations were tied to specific areas of expertise that came up in tech projects, to learn and manage everything from hardware to software to html coding. Several added that staff turnover exacerbates the problems of maintaining procedures and systems that become "tax and difficult to maintain," as does staff's intermittent use of technology: "the AD, who updates constantly, remains adept at the process. The managing director, who uses the tool more sporadically, forgets procedures." Relying on volunteers met with the anticipated mixed results because "you are not a priority" for volunteers who have limited time; one told a story of software that was installed by a volunteer on the wrong drive, and eventually "crashed and disappeared". A less frequent but intense problem was the **resistance to change from staff that did not want to adapt to new software and systems**; these staff members either would not or could not take the time to learn new systems, as with one project: "Adoption [to the project] and use by staff was fair. Some utilize the features, many do not want to try something new."

**Most shortcomings in human resources surfaced in organizations that had attempted to adapt to new software systems. It became evident that staff lacked the knowledge and/or training to implement these new systems or web designs (41).** Capabilities of some new software more than surpass the training that is typically provided, leaving respondents with expensive programs they were not fully or effectively using. There is a strong need for more or better training, which in some instances means an adequate investment to purchase this training. Either way, training is "probably the most difficult obstacle to overcome," one said. Lack of internal tech expertise to "drive and manage the process" can leave organizations dependent on, as one said, "total reliance on a very busy outside vendor."

**Respondents lamented the shortfalls of vendors as a major reason for their problems with tech projects (39).** Many that had sought external expertise described it with words such as "awful," "frustrating," and "insufficient." One reported that a "vendor's local installer (data converter) did a TERRIBLE job." Complaints about vendors included lack of follow through after installation, missed deadlines, and services that were promised but not delivered. As one said, "almost all [vendors] have some gaps in their knowledge no matter what they tell you." A few stressed that consultants or vendors' lack of arts expertise hindered the services provided. Relying on resources that do not materialize places an even greater burden on staff. One said, "Once we found a capable, efficient and reasonably priced independent consultant, we were fine. Prior to that, we were on contract with a small tech company and had one headache after another. We had major issues that ate up a huge amount of time and energy."

#### *What Worked Well*

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<sup>43</sup> A significant number (108) of responses left question 31 blank or wrote "none". 2 responses described technological frustration rather than a significant project. Other organizations (37) described projects that were in progress at the time of the survey and could thus not give definitive answers to questions 32 and 33. As one reported, it was "too soon to tell."

**Staff leadership could drive a project's success. When staffing was effective, it was due to collaboration across departments, a level of staff enthusiasm among those who wanted to see projects succeed, or the efforts of staff to trouble shoot effectively (26).** Having a "project champion" could make or break a project. As one said, "I wish it hadn't been me carrying the burden of learning it all and implementing it all . . . but subsequently I was able and still am able to troubleshoot effectively for many problems, a hidden benefit and cost savings to my organization." When someone internally could use technology it was acknowledged with gratitude and relief: "The learning curve is high for us here. Thank heavens our business manager knows how it works. But it needs to be easier for the more casual/infrequent user."

Just as important was **teamwork for across-the-board changes**, which meant "getting the staff involved" and having representation from each department. As one respondent said, "the cross functional collaboration between each of our administrative team has been exceptional." Another gave a specific example: "our staff have been relentless in communicating issues encountered with the new box office software and creative in making it serve the theater's needs." Board or tech task forces were mentioned as resources in a few instances. Even so, there still seemed to be a need to **have an available person responsible for the project or upgrade after the initial installation was completed**; this was mentioned repeatedly regarding software or web upgrades: "the approach works well but it still requires an employee dedicated to keeping content current." Considering the number of organizations that do not have dedicated IT staff, one can assume that the staff heroes were playing this role.

**Successes in web upgrades in particular seemed connected to having the right person or people to manage the project as well as finding a solution that was tailored to the organization and staff needs (43).** "The website developers did an excellent job of involving everyone organically in the process," one wrote. Those that had upgraded their websites were pleased with their enhanced ability to reach potential patrons, especially when focusing on communication and marketing tools such as social media and interactive features. As one wrote, "Getting out into the cyber world has worked well for us in getting younger constituents." The few organizations who focused specifically on implementing online ticket sales felt that gaining this ability was "crucial" but a mixed bag of success and frustration.

**Vendors and consultants could contribute to these projects' success (68).** As one reported, "The people we brought on are terrific – helpful, hard working, willing to serve us, and easy to work with." **Getting good advice was crucial to some in making the right decisions.** In some instances, having an external IT expert was the ingredient that pushed the project forward. One respondent epitomizes both of these attributes in telling their story:

*Conversion went smoothly because we had a volunteer with experience do our leg work, interview vendors, review contracts, schedule conversion with the least interference and stay on top of tech hours, etc. It would be hard to improve upon the expertise and efficiency that he brought to the table. He happened to be a trustees' husband and was committed and understood our strengths and weaknesses so we didn't get oversold or undersold.*

One summed up an approach that was common to many organizations that combines in-kind resources, good advice, and heroes:

*We do not have a dedicated staff member to manage our technology, so each new technology project is a learning curve, but we draw on the support of our board and our colleagues to make educated decisions about our technology needs and purchases.*

## **Knowledge**

### *What Didn't Work*

**Respondents were frustrated with projects that did not meet the organization's needs or expectations (32).** Many found that the end result of their tech project "works, but has drawbacks." Comments were often vague, with broad statements such as "the software is not meeting our needs," but generally circulated around problems with donor and ticketing software and databases. Organizations expected the programs to work better than they did, as one commented: "databases have been helpful in many ways; however we have yet to utilize them to their full potential because of a complicated layout and editing system." Some specifically mentioned that pulling useful reports was a problem with their software.

**Appendix D. Qualitative Questions: Summaries of Findings**

**Respondents felt that their tech efforts might have gone better had they had access to better information or expertise (20).** Those who specifically referenced problems with planning or inadequate research generally referred to software-related projects. Most felt that projects had not been well-thought out, and were finding themselves playing catch-up to make up for their unpreparedness. As one described, “we need to be proactive in planning for our technology needs, not reactive.” Others mentioned that more research should have been done at the senior-staff level prior to purchasing. We have since discovered that there are better programs and options available to us . . .”

**Organizations were also frustrated about the amount of time needed to complete projects (19). Responses were split on whether this was due to inefficiencies or to unpredicted challenges during the implementation process.** Few provided specifics as to why these delays took place, although many seemed to be related to outside IT sources, such as one who was frustrated that it was “difficult to get responses from the pro-bono firm.” Others felt that delays were common when it came to dealing with technology in general: “The turnover has not gone as quickly or smoothly as we would have liked, but this seems to happen with all new technologies.” Lengthy project implementation was eating into staff workloads and already tight budgets.

*What Worked Well*

**The few respondents who were more specific about their successes had found that active planning and budgeting had smoothed the process (15).** Engaging in in-depth software research generally led to rewarding results: “Search was long but fruitful. Found a system that fit our needs and more, and was within our budget.” Another found that research helped “pinpoint what we needed” and thus the product was less likely to surprise with unsavory quirks later.

**Integration***What Didn't Work*

Problems arose with software when data management systems did not integrate with one another (7). **This problem, generally seen between donor and ticketing software although occasionally with website editors, seemed either the result of software incompatibility or the program being inaccurately advertised by vendors.** As one respondent stated, “The two systems, supposedly integrated, are not well integrated. Vendor is not able to fix the flaws satisfactorily.” In the case of software incompatibility, the task of getting the programs to “talk” to each other generally fell to staff to attempt to resolve.

*What Worked Well*

Every project that included software integration mentioned either ticketing or development software, if not both. **Although few (18) were specific about what helped the process work, most described how, when complete, the integrated systems helped to “manage ticket sales and fundraising.”** One theorized that their integrative approach worked well because of the new “system models our business processes.” A few that were using Tessitura found that purchasing the software as a consortium had significant benefits: “combined talent and expertise, reduced competition, knowledge sharing, decreased workload to execute the project and shared costs.”

**Funding***What Didn't Work*

**Generally organizations felt that they could not complete their projects or fully address their needs because of lack of monetary resources (24).** Several were forced to reassess tech plans because of underestimated costs: “we had intended to install more shared LAN resources and these plans were abandoned because of cost overruns in other aspects of the project.” **While those who did receive grants found them helpful, problems arose when they were not able to predict additional associated costs that arose in tech projects.** Some had to make painful funding choices: “While our box office capacity was significantly improved...we could not raise enough grant money to purchase a true state-of-the-art ticketing system.”

*What Worked Well*

Not surprisingly, **gaining funding or gratis services to pursue these endeavors was one of the most helpful steps an organization could include in these tech projects (23)**. As one wrote: “The important part was having a board member to execute the plan and a grant to pay for it.”

### **Survey Question 60 (520 respondents and 1189 codes)**

Question as it appears in the survey:

*What would you say are the most pressing technological issues facing your organization at this point in time?*

#### Summary

When asked about their most pressing technological needs, 520 organizations responded. **Although these responses conveyed a wide variety of needs, plans, and goals, from training staff to buying new printers, a few trends did emerge and were often expressed in one of two ways:**

- 3) **As a laundry list of desired improvements, often lacking specificity, that were interconnected in the same sentence** (one wrote, “Networking, fully functional computers and consistent operating platforms, data storage and access, website maintenance, communications technology”).
- 4) **As a solution-oriented statement** (another needed “[m]ore strategic Affinity Marketing using technological tools and trends, [and to] elevate on-line contribution tools to become more efficient and user friendly”).

In essence, some organizations seemed overwhelmed about their technological weaknesses, while others were more confident about how improvements could be accomplished. This dichotomy appears throughout responses, especially those that emphasize integration of software systems.

Another thread through responses was a level of anxiety about technological needs, especially **about staying current and about making the right choices for technological expenditures**. The worry about staying abreast of technological developments appeared over and over. Respondents hesitated to make large investments in technology if the products they bought were likely to become quickly obsolete. Many also reported that the products they owned were aging, but they didn’t have the funds to replace them (see the section on software). An issue that arose in comments about software was choosing what to buy, as the section on knowledge reports. Respondents were unsure of the right product for their needs, and feared blowing their budget on the wrong technology. **Regardless of the areas of need listed, funding and staffing were emphasized at all budgetary levels, and often woven into other requests**. Regarding funding (130, or 25% of responses and 16% of codes), respondents needed larger budgets not only to buy products, but to attain the skill set (whether through training, outside consulting, or time to learn independently) to adopt new technology—or as one wrote, “ifinding the funding and time to keep up with technological advancements.”

#### **Software, Hardware, and Security** (283, or 54% of responses and 22% of codes)

**Respondents need better software practices and programs** (145). For instance, 95 **expressed a strong desire to upgrade their software**. Respondents particularly needed “**more recent versions of basic operating software**.” Indeed, many revealed a certain amount of anxiety about keeping up with software developments, with several comments using the word “**antiquated**” to describe their software, and one wrote, “The need to continue updating/replacing software is a challenge . . . Microsoft changes its underwear too often. Accounting programs make changes that are often unwanted and require a large investment of time to figure out.” Several also seemed nervous about the costs and complexity of software that they wanted, such as Tessitura.

**New or upgraded ticketing software was a priority in 27 responses and online ticketing in 33 responses**. Some were not sure what ticketing software to use, as one respondent wrote: “We want to sell tickets online, but have difficulty choosing and affording adequate software.” Others added that they would prefer to change their current

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ticketing software so that they could bring their box office in-house. One was interested in “controlling and maintaining our OWN box office, rather than lose money to ticket sales providers.” Several responses brought up the topic of ticketing systems’ expense, and a few mentioned needing additional staff for ticketing.

**Many organizations wanted newer, more capable hardware** (109 comments). Here again, there was concern about aging equipment, and about being able to afford needed upgrades. One respondent wrote, “We should be upgrading our equipment at a faster rate than we can afford,” and another bemoaned the “obsolescence of equipment.” While many money complaints came from organizations with lower budgets, even the organizations with larger budgets were dealing with problems such as “aging hardware infrastructure” and “antiquated hardware.”

**Some of the responses on hardware needs seemed well informed and confident** about the problems facing their organizations, as well as their possible solutions. Concrete goals included investing in a new server, networking, or better printers. One such respondent wrote, “We know what we want. We have the business and technical acumen to design and implement [it] . . . Our challenge is related to our overall lack of capital.”

Respondents mentioned **security as a technological need, both for their systems (18) and for their data (10)**. Organizations were concerned about the possibility of losing valuable information on finances and audience development in the event that their hardware or software failed. One wrote, “Data virtualization/disaster recovery needs to be integrated into daily backup process . . . and will require substantial funding.” Others wanted to ensure the privacy of online financial transactions, or “making sure the account information of our customers is as protected as possible.”

**Integration** (275, or 53% of responses and 23% of codes)

By far the most frequently reported technological need was **the need for integrated software systems**. Organizations wished to be able to merge important databases and benefit from a more multi-faceted repository of information. However, while 275 responses indicated a desire to integrate automated systems, these responses varied widely as to both the intended uses of integration and the degree of specificity and knowledge respondents displayed.

Many responses (114), exhibited **a strong inclination to integrate systems, but also uncertainty about how to do so and what the end results would be**. Some knew what they needed but not how to describe it, such as one that had “outdated production and office equipment that doesn't work together.” Others mentioned integration, but in vague ways; a typical response was “We need integrated system upgrades.” Many lacked confidence and knowledge in how to go about it integration. “How do we accomplish the patron (tickets and donors) integration we seek?” one asked, continuing, “Ticketmaster, costs, and time all make this difficult.” Some also had concerns about the different types of software, and the time and costs associated with integration.

One large segment of responses (72) dealt specifically with **the need to integrate fundraising or donor databases with other systems**. Organizations wanted to use the information they could gather from these different systems to create a clearer picture of who their patrons and donors were. A similar theme emerged in **the 40 responses that focused on integrating systems related to specific constituent groups**, such as students or volunteers. They wanted to use audience data in their marketing and development campaigns. A few (13) also **viewed integration as leading to better communication among departments**.

**33 respondents mentioned ticketing software and programs as one area they would especially like to integrate with other databases**. Ticketing software integration was not just one item on a wish list for some organizations but a pressing financial need. “The ticketing/donor system we use is awful, does not integrate with anything else, and not user friendly. It is critical that we replace it,” one emphasized.

**Online Presence, Website, and Social Media** (188, or 36% of responses and 15% of codes)

150 or 29% of total comments mentioned organizations’ websites, or using online tools in some way. Of these, **most (103) were concerned about updating or improving their websites**. For instance, one wrote, “We want to

have an online searchable database for writers, producers, and anyone interested in new work.” Another was interested in —making our website informative, helpful and a better marketing tool.” Some also enumerated obstacles to accomplishing these ideas, including lack of expertise and training. **As in previous technology needs, cost was a factor;** as one wrote, —The high-cost to maintain and enhance our website is an ongoing concern.” Many were vague about the nature of online upgrades, often throwing in —website design” or —redesigning website” within a list of other technology needs.

**38 respondents needed to improve communication,** such as email and e-newsletters. One wrote, —Email marketing is not where we would like it to be. There has got to be a way to have e-newsletters without an enormous fee.”

Others hoped to **increase communication using social media techniques** (15) and some were interested in **using online tools for marketing strategies** (14). Some mentioned podcasts, video, and blogs, while others were interested in social networking, such as one who wanted to work on —development of Facebook and MySpace type viral marketing plans.” Not all respondents were positive about online marketing, however: —Online advertising. . . is cost prohibitive . . . We anticipate extreme backlash from our aging patrons as we transition to 95% of our information being disseminated online/via email.”

#### Staffing Issues (136, or 26% of responses and 7% of codes)

**104 respondents (20%) desired additional, or improvements in, IT staffing.** Organizations **were most concerned about training their staff to use new technology** (49). As one put it, staff needed —knowledge of what is possible.” Lack of training was a problem for organizations interested in —keeping the staff current and at the same level of proficiency.” They also **lacked time to learn about technology** (32).

**55 needed additional staff, 22 of which specifically desired IT staff.** Organizations were too busy to perform or train others in technological duties, as one respondent wrote: —IT training and coordination needs more full time professionals than we can now afford without neglecting our core mission.” Another commented, —As we are understaffed, it is difficult to put in the training time to learn how to best and most efficiently use our newly purchased database.” Organizations particularly wanted new staff who already had IT training. However, they lacked the funds —to recruit competent employees well versed in new technologies and communications.”

#### Knowledge Building and Usage (113, or 22% of responses and 11% of codes)

**37 respondents mentioned knowledge as a pressing need** for technological growth. As mentioned below in the staffing section, organizations were concerned about **the need for training in the use of technological products.** However, some also **needed guidance on other questions, such as which technology to buy, how much technology to buy, and how much money to invest in this technology.** One wrote, —New technologies for marketing and online presence are expensive and difficult to figure out what to choose . . . it's hard to know if we would be 'getting it right' for our organization.” Another wrote, —Technology changes fast . . . There may be programs available, but costs are prohibitive and/or we don't have time to learn about the specific pros/cons for our organization.”

48 responses specifically discussed **the need to keep up-to-date technologically** by updating both hardware and software. One example of the general response was —new computers, current software updates, etc.” Others discussed the difficulty of keeping current in bad economic times. Some felt that it was almost impossible to stay current—technology changes too rapidly to remain current for the resources that are available.” Another noted, —The overall frequency with which new investments are needed—[there is] donor fatigue to make large upgrades every 3-5 years.” **Some organizations were more comfortable about the rate of their technological advancement than others:** —Our audience is technology savvy so it is clear that our technology investments, especially online, are helping us to retain and build our constituents. We are challenged in our ability to keep our online presence vibrant, connected and relevant given the immediacy of the medium.”

**Appendix D. Qualitative Questions: Summaries of Findings**

29 responses listed **planning as an area that they needed to improve**. About half of these organizations wanted to develop a technological plan. Others had a plan, but various obstacles prevented them from following it: –We need to be able to use the right technologies in the right way. It is easy to want to use everything, but [it’s better] to be very strategic in what we use and how we use it.”

In closing, it bears repeating that regardless of their array of needs, there was a through line in **respondents’ perceived lack of resources--funding, staff and knowledge--to meet those needs**.

**Survey Question 65 (176 respondents and 216 codes)**

Question as it appears in the survey:

*If you checked “Technology,” please list the types of courses or seminars that were taken.*

**Summary**

Question 65 asked respondents to describe any technology-related professional development opportunities that staff had attended. **By far the most frequently attended trainings were related to database management, most notably ticketing and donor data (103 responses of 176). Another strong tendency was for respondents to be vague, regardless of what type of course they attended.** Of these, **Tessitura was the most popular**, with 38 respondents attending their conferences and trainings. 36 other responses mentioned 16 other name brand database programs, including Filemaker, Archtics, Donor Perfect, Theater Manager, ChoiceTicketing, and Blackbaud; 29 others were either vague about database software or mentioned generic database programs, such as Excel.

Others focused on **marketing and web presence (65)**. 28 attended trainings related to marketing, some specifically about social media and PatronMail. In a similar vein, 17 respondents paid for training on design software, such as Adobe and InDesign; most of these programs dealt specifically with graphic design, but a few focused on sound and video editing. Those that mentioned website development training (20) were generally vague; a few, however, did refer to content management systems such as SharePoint and Drupal.

**A portion of respondents (40) were vague, uncertain or unclear about what trainings they had attended.** One simply wrote –applications,” while another responded with –specific training on our new software.” Others described who was trained, but not on what: –In general, learning was primarily through peer exchange, networking events, and industry conferences. Focused technology coursework was primarily through staff.” A few mentioned that IT staff or consultants held occasional trainings on relevant technology.

A small number (10) had trainings concerning financial software, such as Quickbooks, Great Plains, and Sage.

**Survey Question 67 (169 respondents and 195 codes)**

Question as it appears in the survey:

*If you are uncertain or negative about a course on strategic technology planning, help us understand your reservations.*

**Summary**

Survey respondents were first asked in Question 66 whether a course in strategic technology planning would be useful to their organization. **Of 552 respondents who answered this question, 111 marked that they felt either negatively or uncertain about whether such a course would help. Question 67 asked respondents who felt this way to explain their reservations; 169 did so.** A variety of reservations arose in the comments, ranging from

organizations' internal limitations to concerns about the course content. One comment illustrates most of these concerns:

*I have worked for several non-profit arts companies and even though the organizations were similar, the needs varied pretty widely. Plus, a seminar affects one staff person and does not necessarily change the minds of the decision-makers. The challenge is not finding the right technology, it's funding it, implementing it, and changing staff behavior to get them to fully utilize it.*

**Funding was the most frequently cited reservation** (60). The survey text did not indicate whether the course would be paid or for free. About half of these responses were concerned that they would not be able to pay for the course and/or the fees involved (travel, housing, etc.). Others did not believe that they would be able to fund whatever the course would recommend. As one explained, "Everything [requires] funding to implement. It is frustrating to know what can happen and not be able to make it actually happen."

**A large group of respondents (53) explained that they were unlikely to be able to attend the course because of internal issues**, such as lack of time and staff. 30 felt that they did not have adequate time to fit a course or its recommendations into their schedule; about half of these (13) did not feel that it was a priority. **Almost all (28) of those that mentioned time or prioritization had budgets of less than \$3 million.** A similar issue was lack of staff to devote to technology or a course (15). 8 others felt their technology problems were related to staff attitudes, such as one who wrote, "We are very small and some are very resistant to change. We can expound on great ideas, but the warm, comfy security of the way we've always done it is a problem."

**44 respondents' concerns related to the content of the course.** More than half of these (25) were skeptical that such a course could help; 12 were specifically doubtful that a course could address the varying needs of arts organizations: "How are you going to make such a large topic pertinent to the diversity of arts organizations and how they function in their individual markets with their individual budgets and existing technology situations?" A group of similar responses (19) did show an interest in attending the course if the syllabus was specifically tailored to their organization's needs: "It would have to be focused on our size budget organization. Too small and it would be too basic. Too large and it would assume a larger staff than what we have." A small group (4) was willing to consider taking a course, but was hesitant to commit until they had more information.

**A smaller subset (23) used the space to explain that they did not need a course. Respondents in this category ranged in size and budget**, such as one smaller organization that wrote, "We are a] small amateur orchestra run almost exclusively by volunteers, many of whom are knowledgeable about the relatively low level technology needs we have." Organizations with budgets of \$1 million or more generally responded that they had found the expertise they needed either locally or internally.

11 other responses offered miscellaneous reasons or wrote that the question was not applicable.

### **Survey Question 69 (90 respondents and 90 codes)**

Question as it appears in the survey:

*If you did not check "Executive Director (or equivalent)," please help us understand your response.*

#### Summary

Question 69 acted as an addendum to Question 68, a multiple-choice question which asked respondents to select which of their staff would attend a course in technology planning. If respondents did not mark their Executive Director (or equivalent) as a potential attendee, they were asked in Question 69 to explain why. **Respondents frequently were the ED equivalent.**

**Appendix D. Qualitative Questions: Summaries of Findings**

**Many EDs (24), while supportive of a class, wanted to take best advantage by sending staff who were more likely to benefit.** Most delegated training to staff not because they were resistant; rather, there seemed to be a general understanding of how technology could help when in the right hands. One ED wrote, —An old dog, I am strongly interested, but don't have the chops. I'll support the younger members of the team to get up operationally on that technology which is necessary.” These respondents emphasized that attending staff would report back, as one explained: —Too many things already on my plate—would look to other staff to become knowledgeable and rely on their recommendations.” Trust in staff's abilities was implicit.

**Others (18) were disinterested because technology was not a priority or had been delegated to other staff.** One wrote, “[The ED equivalent] focuses primarily on artistic and fundraising aspects of company,” implying that the course would not be relevant. Others listed positions such as Managing Director, Financial Director, and General Manager as in charge of handling technology.

**19 were not sizeable enough or structured to have an Executive Director.** Other reasons included **competing priorities or lack of time** (9 responses). 7 reiterated that the course would not be helpful, and a few others reported miscellaneous reasons.

### **Survey Question 72 (121 respondents and 151 codes)**

Question as it appears in the survey:

*If you needed to seek input from staff members in order to answer certain questions in this survey, please list the title(s) of the person(s) you consulted.*

### Summary

Question 72 requested respondents to list staff members, if any, who helped fill out the survey. **Of the 121 who answered this question, half (61) listed at least two other people who helped inform their answers; some listed between three and ten. Most received assistance from senior staff members.** Marketing, development, and finance staff were the most frequently consulted (52 respondents). About a third sought help from miscellaneous senior staff members, such as General Managers, Comptrollers, Special Projects Directors, and Office Managers. **Only a few (16) sought input from artistic staff**, including Artistic Directors and Production Managers.

Some listed IT staff (28) or Technical or Operations Managers (8) as go-to people for help with the survey. **Very few IT or technical staff were mentioned by companies with budgets of less than \$3 million.** The majority who listed IT staff were companies of \$10 million annually or more. Smaller companies who mentioned IT staff were more likely to be referring to volunteers or staff members whose jobs included IT duties.

A small number of responses (12) were miscellaneous, including some that used the open-ended space to answer other questions.