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Building community among museum information professionals: a case study of the Museum Computer Network

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Museum information professionals meet the needs of the producers and consumers of museum information resources, yet, little is known of how their own needs are met or what benefits they obtain from being part of a broader professional community. This study presents results from a survey of 283 individuals who were asked about their relationship with the Museum Computer Network, an international professional organization dedicated to supporting the needs of museum information professionals. The results shed light on how professional organizations can meet the needs of individuals who share a common interest in museums and information technology, particularly when those individuals are professionally diverse and geographically distributed. The results can help researchers and practitioners better understand how to build community among museum information professionals, and have implications for all organizations supporting the needs of museum professionals.

Keywords: museum management; museum information professionals; professional organizations; communities of practice; professional development; Museum Computer Network

Introduction

Organizations that endeavor to meet the needs of national or international groups of museum professionals face considerable challenges. What is the best way to build community among diverse groups of individuals who share a common interest in museums? How can new information technologies encourage communication among geographically distributed individuals with varied professional backgrounds? What tools are available for meeting the needs of individuals who share career paths, but may only see each other once a year at conferences?

These questions are particularly problematic for organizations that support museum information professionals, defined as individuals who meet the needs of the producers and consumers of museum information resources, on-site and online (Marty 2007). The development and use of information technologies in museums have accelerated at a rapid rate over the past 40 years (Parry 2007), and keeping up with evolving information technologies while meeting the changing needs and expectations of museum visitors can be difficult. Being part of a community of

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individuals facing similar challenges and sharing best practices is critical to the success of museum information professionals on the job. Given the importance of museum information professionals within the larger museum community, there is a need to examine the different approaches to developing and sustaining communities of museum information professionals.

To meet this need, this paper presents results from an online survey designed to assess how one professional organization – the Museum Computer Network – works to meet its members' needs, and how it might improve its ability to do so through new technologies, information resources, and other support mechanisms (Soren 2011). The results of this study will help researchers and practitioners better understand the role of professional organizations in meeting the needs of museum professionals writ large, and shed light on how organizations that support museum information professionals can build a community among disparate groups of individuals who work at a distance from one another, and share a common interest in museums and information technology.

Background

Building and sustaining an ongoing and involved community of museum professionals is not easy, especially as new technologies emerge and the museum field evolves. At the same time, emerging technologies may actually strengthen an individual's ability to become more involved with professional organizations, providing new avenues for engagement. Different organizations and communities for museum professionals, therefore, have explored various approaches to supporting their members and keeping them active and engaged over time and across distances.

Professional organizations supporting museum professionals

The International Council of Museums (ICOM) is concerned with the tangible and intangible cultural properties of society, with a commitment to their conservation, continuation, and protection (http://icom.museum/). Established in 1946, ICOM provides support for museum professionals through its five main missions: to establish standards of excellence, to lead a diplomatic forum, to develop a professional network, to lead a global think tank, and to carry out international missions. ICOM also supports the needs of museum information professionals through such initiatives as the museum Top-Level Domain (Karp and Hamma 2001) and the International Committee for Documentation (CIDOC) Conceptual Reference Model (Doerr 2003).

The American Alliance of Museums (AAM, formerly, the American Association of Museums) has 13 Standing Professional Committees that offer professional development and networking opportunities for museum professionals. AAM's Media and Technology Committee, for instance, focuses on the use of media technologies to help museum professionals meet the needs of their public by advising on the national policies, trends and issues; organizing conference sessions, and sponsoring the annual Multi-User Simulation Environment (MUSE) awards competition to recognize achievements in the museum media and interactive programs (http://www.media andtechnology.org/). The Education Professional Network Committee fosters professional standards, best practices, and leadership in museum education that

are integral to the entire museum field, and promotes a wide range of professional development programs for museum educators, such as Learning in Museums workshops (http://www.edcom.org/). The National Association for Museum Exhibition identifies best practices and recent innovations, provides access to resources, and promotes professional development designed to advance the value and relevance of museum exhibitions (http://name-aam.org/).

Other museum professional associations, such as the Canadian Museums Association (http://www.museums.ca/), Museums Australia (http://www.museums australia.org.au/), and the UK Museums Computer Group (http://museumscomputer group.org.uk/) offer regular conferences, workshops, online discussion forums, and other opportunities for professional development, mentoring, and networking. The Museum Education Roundtable (MER) has inspired professionalism among museum educators since 1969 by orientating museum learning toward leadership, scholarship, and research, and supports museum professionals through its publications, programs, and communication networks (http://museumeducation.info/).

Communities of museum information professionals

One type of museum professional in need of support from professional organizations is the museum information professional, a category that includes registrars, librarians, webmasters, digital collections managers, and chief information officers. Over the past few decades, the role of the museum information professional has evolved dramatically to reflect the changing nature of information work in museums today, and information professionals increasingly find themselves making decisions that may influence entire museums (Marty 2007). Building an engaged community among museum information professionals is critical to supporting this evolving role; yet, few studies have explored how best to support their needs.

There is extensive research examining how museum information professionals use new media tools to build communities and engage museum visitors (Russo and Watkins 2008). Museums are creating knowledge-sharing networks in which participants share images, information, and experiences in ways that enable them to become co-creators of a digital culture (Liu and Bowen 2011). While such experimentation is enticing, sustaining audiences has proven more difficult, unless museum professionals can find the right motivation for users to revisit websites and social media sites (Russo et al. 2008; Russo and Peacock 2009). It is important to document the resources museum information professionals need to support the museum's online visitors and attract new audiences (cf. Liu et al. 2010).

Few researchers, however, have examined the process of building community among museum information professionals themselves (Beler et al. 2004; cf. Gilliland-Swetland and White 2004). Bowen, Houghton, and Bernier (2003), for instance, examined how online tools such as discussion forums, mailing lists, and newsgroups can help build a community among museum professionals and visitors (cf. Bernier and Bowen 2004). Museum information professionals frequently create their own online communities using such tools as Facebook, LinkedIn, or Twitter. Students and emerging professionals are particularly active on these sites, using them to share experiences, network, and discover professional development opportunities.

Given the value of information professionals to the museum community, it is important to examine the role of professional organizations in supporting the needs

of museum information professionals. Case studies of relevant organizations that explore how they build community among their members could provide valuable guidance for researchers and practitioners interested in supporting the needs of museum information professionals. In particular, the concept of communities of practice (Lave and Wenger 1991), with its emphasis on shared domains of interest, practices, and community interactions, can provide a helpful theoretical framework to guide researchers interested in learning more about how professional organizations can better support museum information professionals as a community (see, for example, Moussouri (2012), on using communities of practice as a framework for conceptualizing and studying computer-supported collaborative exhibition development).

The Museum Computer Network as a case study

The Museum Computer Network (MCN) provides an example of a professional organization that supports a global network of museum professionals interested in developing, managing, and conveying museum information more efficiently. Established in 1967, MCN began as an informal grouping of museums in the New York City area, whose main objective was to automate their registration records (Misunas and Urban 2010). Today, MCN encompasses an international community of more than 300 museum information professionals sharing their expertise and experiences with information technology in museums.

MCN offers the museum community continuing opportunities to explore, implement, and disseminate ideas about new technologies and best practices in the field, and supports its members through annual conferences, regional and topical special interest groups (SIGs), and online resources such as listservs (http://www.mcn.edu/mcn-l/), websites (http://www.mcn.edu/), and blogs (http://www.musematic.org/). MCN members are engaged in diverse tasks such as managing websites, creating network infrastructures, overseeing visitor services systems, and working with collections management and registration systems. In particular, MCN's annual conference creates professional development and educational opportunities, and provides museum professionals with a venue for networking with like-minded individuals.

Despite these efforts, meeting needs for museum information professionals can be challenging, and MCN – like most professional organizations – struggles with the challenge of engaging its members throughout the year. The MCN Board of Directors developed several initiatives to build a community (Museum Computer Network 2007), such as the MCN Project Registry, where individuals can share information about technology projects (http://mcn.edu/registry/). It remained uncertain, however, how best to engage MCN members within the professional organization, and there was a clear need to assess how their needs are currently being met, and how those needs could be better supported in the future. The results of such an examination have implications for all organizations supporting the needs of museum information professionals.

Methods

To meet this need, this study addressed the following research questions:

(1) What are the demographics, profiles, and needs of MCN community members?
(2) How is MCN meeting the current needs of this community?
(3) How can MCN better meet these needs through new resources or forms of support?

To answer these questions, the researchers developed an online survey that invited participants to answer questions about how MCN is (or is not) meeting their needs, and what MCN could do to meet their needs better in the future. The survey was advertised widely on MCN's website and listserv (MCN-L), and through social media using MCN's blog and twitter account. The researchers hoped to reach individuals with a range of connections to MCN, including past, present, and potential members, conference attendees, listserv subscribers, and general website visitors.

Individuals who were elected to participate were taken to an online survey that explained the goals of the research, and asked two introductory questions. Respondents were asked to indicate their relationship with museums, selecting from the following options: museum professional, library, archives, or other memory institution professional, researcher, consultant, educator, student, or other (please specify). Respondents were then asked to describe their relationship with MCN, selecting from the following options: current MCN member, past MCN member, considering MCN membership, MCN annual conference attendee, MCN-L subscriber, MCN website visitor, or other (please specify). Respondents were able to select more than one option in each case.

The first section of the survey focused on MCN community needs. Respondents were asked to indicate how useful they found existing resources provided by MCN. This question employed a 5-point Likert scale ranging from Not at all Useful to Very Useful, and listed resources such as the MCN website, annual conference, and project registry; individuals who had not used a given resource were instructed to select not applicable (N/A). Respondents were then asked to indicate how likely they would be to use specific resources if MCN were to provide them. This question employed a 5-point Likert scale ranging from Very Unlikely to Very Likely, and listed resources such as a repository of sample job descriptions, webinars facilitated by MCN members, and videos of MCN conference presentations. Finally, respondents were asked how important it was for organizations such as MCN to meet specific needs of its members. This question employed a 5-point Likert scale ranging from Very Unimportant to Very Important, and listed needs such as a sense of community, professional development, and employment assistance. Each question was followed by a space for survey respondents to enter open-ended comments or suggestions.

MCN community benefits were the focus of the survey's second section. Respondents were asked to indicate the benefits they felt they obtained from being part of the MCN community, selecting from such options as sourcing new ideas, networking, and attending MCN's annual conference. Respondents were then asked two open-ended questions: If MCN could improve upon the services or resources it currently offers, what improvements would you suggest? Second, please share with us any other thoughts you have about what MCN should be doing to meet the needs of its members and community.

The final section of the survey asked demographic questions including age, gender, education, years of experience in the museum field, and years of MCN membership. Respondents were also asked whether they belonged to any other museum or technology-related organizations, and whether they attended any other museum or technology-related conferences.

The quantitative results from the survey were processed through Excel, which was used to generate descriptive statistics for each of the close-ended survey questions. The open-ended questions were analyzed using qualitative analysis techniques, including a process of coding and memoing as outlined by Strauss and Corbin (1998) in order to identify common themes among the responses (cf. Charmaz 2006). Quotes are included in the findings below as representative examples of these themes, but may have been edited to ensure participant anonymity.

Findings

The MCN Community Survey ran from 15 October to 2 December 2011. A total of 283 individuals began the survey during that time and 229 completed it (a completion rate of 81%). Not every respondent provided a response to every question, and therefore specific numbers of responses are presented for each result. Select qualitative responses from the open-ended questions are offered as examples to complement the quantitative results.

Participant demographics

When asked to describe their relationship with museums (Table 1), survey respondents predominantly described themselves as museum professionals (65.6%) with library, archives, and other memory institution professionals (14.9%) and students (14.2%) essentially tied for a distant second place. All the respondents considered themselves associated with museums in some fashion. In addition to researchers (10.0%), consultants (9.6%), and educators (8.9%), 29 other responses listed relationships such as art dealers, museum vendors, artists, bloggers, developers, visitors, volunteers, publishers, and designers.

When asked to describe their relationship with MCN (Table 2), 43.4% described themselves as MCN website visitors, 40.2% as current MCN members, 28.8% as annual conference attendees, and 24.9% as MCN-L subscribers. A small number of respondents (8.5%) were past MCN members and 23.5% were considering MCN

Table 1. Relationship with museums.

How would you describe your relationship with museums?	%	n
Museum professional	65.6	184
Library, archives, or other memory institution professional	14.9	42
Student	14.2	40
Other	10.3	29
Researcher	10.0	28
Consultant	9.6	27
Educator	8.9	25

Note: $n = 281$, respondents were able to select more than one option.

Table 2.   Relationship with MCN.

How would you describe your relationship with MCN?	%	*n*
MCN Website Visitor	43.4	122
Current MCN Member	40.2	113
MCN Annual Conference Attendee	28.8	81
MCN-L Subscriber	24.9	70
Considering MCN Membership	23.5	66
Other	11.7	33
Past MCN Member	8.5	24

Note: *n* = 281, respondents were able to select more than one option.

membership. The 33 other responses provided more detail about their relationships with MCN (e.g., past president or board member), explained that they were attending or presenting at the annual conference, or indicated curiosity about MCN as an organization (such as a self-described lurker or Twitter follower).

The majority of the survey respondents were females, under 40 years of age, with graduate or postgraduate degrees.

- There were twice as many female (69.2%) as male (30.8%) participants (*n* = 227), and the participants' ages (*n* = 229) ranged 20–29 (24.5%), 30–39 (31.9%), 40–49 (23.6%), and 50–59 (16.6%). Only seven respondents indicated ages ranging from 60 to 69, one respondent 70 and older, and no respondents under 20.
- Majority of the respondents (*n* = 228) listed graduate (50.0%) or postgraduate degrees (21.1%) as their highest level of education, with 21.9% listing undergraduate degrees, and 5.3% professional degrees. Only one respondent listed community college and three respondents listed high school as their highest level of education.

More than half of the survey respondents had 10 years or less of museum experience, and were either not MCN members or had been MCN members for three years or less:

- When asked how many years of experience they had in the museum field, 25.1% of the respondents (*n* = 227) had three years or less of museum experience; 21.6% had four to six years; 15.4% had 7–10 years; 10.1% had 11–15 years; 7.5% had 16–20 years; 11.9% had more than 20 years, and 8.4% responded N/A (perhaps indicating that less-experienced individuals have a greater need for organizations, or that more experienced individuals were less inclined to complete the survey).
- When asked how many years they had been MCN members, 30.4% of the respondents (*n* = 227) had been members for three years or less; 9.3% for four to six years; 4.8% for 7–10 years; 2.2% for 11–15 years, 3.1% for 16–20 years; 0.9% for more than 20 years, and 49.3% responded N/A.

When asked about other museum or technology-related organizations to which they belonged, and other museum or technology-related conferences that they attended,

survey respondents made it clear that their professional organization experiences were not limited to MCN or its annual conference.

- About 37.1% (105) of the survey respondents belonged to additional organizations, including the AAM (48%, $n = 105$), technology organizations such as the AAM's Media and Technology group or the Museums Computer Group in the UK (25%, $n = 105$), and a variety of other associations related to archives, libraries, arts, education, history, and culture, as well as national, state, provincial, and regional associations.
- About 48.8% (138) of the survey respondents attended additional conferences, including Museums and the Web (45%, $n = 138$), WebWise (11%, $n = 138$), and a variety of other technology-oriented conferences such as Digital Media and Learning, Electronic Visualization and the Arts, and Digital Strategies for Heritage.

These demographics indicate that the survey respondents included a wide range of museum professionals involved with many different museum and technology organizations and conferences. The following results, therefore, shed light on the mindset of an important group of individuals who are at the cutting edge of new technologies, and looking for ways to become more involved with organizations supporting museum information professionals.

MCN community needs

When asked how useful they found the resources provided by MCN (Table 3), survey respondents indicated that the three most useful resources currently provided by MCN were the MCN website, the MCN annual conference, and the MCN-L listserv. More than two-thirds of the survey respondents (68%) found the MCN website useful or very useful, 55% found the MCN annual conference useful or very useful, and 47.2% found the MCN-L listserv useful or very useful. The least useful resource according to the survey respondents was the MCN project registry (a user-generated

Table 3. Usefulness of existing MCN resources.

How useful do you find the following resources provided by MCN?	Not at all useful	Not useful	Neutral	Useful	Very useful	N/A	n
MCN Annual Conference	0.0% (0)	1.3% (3)	6.0% (14)	13.2% (31)	42.1% (99)	37.4% (88)	235
MCN-L listserv	0.9% (2)	1.7% (4)	9.0% (21)	19.3% (45)	27.9% (65)	41.2% (96)	233
MCN Website	0.4% (1)	4.3% (10)	18.4% (43)	50.9% (119)	17.1% (40)	9.0% (21)	234
MCN/AAM Musematic Blog	0.4% (1)	3.9% (9)	21.2% (49)	24.7% (57)	11.3% (26)	38.5% (89)	231
MCN SIGs	0.9% (2)	4.7% (11)	17.7% (41)	14.2% (33)	9.5% (22)	53.0% (123)	232
MCN Project Registry	1.7% (4)	4.4% (10)	21.8% (50)	9.6% (22)	6.6% (15)	55.9% (128)	229

repository of information technology projects in museums), with only 17% considering it useful or very useful. More than half of the survey respondents used neither the MCN special interest groups (53%) nor the project registry (55.9%).

Thirty-six (15%) of the survey respondents commented on the usefulness of existing MCN resources, and their comments focused primarily on the website, communication, and the project registry. Comments related to the website stressed the relationship between the website and the MCN conference:

> The website is mainly just useful right before, and during, the annual conference time. The site is a bit confusing. You have to look twice to find the right information. For example: Is there an overview of all the visitors? Or the speakers?

Comments related to communication focused on the importance of using social media to reach out to MCN community members, especially between conferences:

> I remain connected to the MCN community predominately via Twitter, RSS feed (Musematic), and email (Listserv). I tend to forget about the Project registry because it's not connected with my other feeds in any way, or tweeted about much (that I notice.) I use the website for conference predominately in relation to the conference. The networking opportunities at the conference are invaluable.
> I've looked at the blog but it's been awhile. I will go check it out and add to my delicious bookmarks and sign up for an RSS feed (there is one, yes?). Thanks for bringing back to my attention!

Responses related to the project registry praised the goals of the project, and included suggestions for improvements:

> The Project Registry, though a very good idea, is hampered by a lack of participation and the inability to sort projects by date to distinguish past projects, current projects, and pending projects.
> Your website, blog and project registry are wonderful sources. Even projects that might be out of budget range offer creative solutions and can potentially be modified for smaller budgets. It is wonderful to see what is being done at a national level. I would like to see entries more up-to-date and budget ranges specified.

When asked how likely they would be to use different resources if MCN were to provide them (Table 4), survey respondents indicated that they would be most likely to use a list of contacts working in media and technology (86.9% likely or very likely), or a repository of sample job descriptions (74.6%, likely or very likely), and slightly less likely to be interested in webinars facilitated by MCN members (65.6%, likely or very likely), or videos of MCN conference presentations (70.1%, likely or very likely). Approximately two-thirds of the survey respondents expressed interests in social media tools, such as a space for community members to post exemplary projects (69.6%, likely or very likely), a blog for MCN members to share new ideas, successes and challenges (66.3%, likely or very likely), and a social media portal to connect with others in the community (63.3%, likely or very likely). The least likely resource that survey respondents would use was funding for SIGs to hold regional meetings (47.4%, likely or very likely).

Sixteen (7%) of the survey respondents commented on the likelihood of using potential MCN resources, and their comments focused on providing resources that were useful without requiring too much time, and ensuring that new tools were not

Table 4.　Likelihood of using potential MCN resources.

How likely would you be to use each of the following resources if MCN were to provide them?	Very unlikely	Unlikely	Neutral	Likely	Very likely	*n*
List of contacts working in media and technology	1.3% (3)	1.3% (3)	10.4% (24)	46.5% (107)	40.4% (93)	230
Social media portal (to connect with others in the community)	4.4% (10)	8.7% (20)	23.6% (54)	34.5% (79)	28.8% (66)	229
Videos of MCN conference presentations	0.9% (2)	12.1% (28)	16.9% (39)	42.0% (97)	28.1% (65)	231
Repository of sample job descriptions	6.6% (15)	8.3% (19)	10.5% (24)	46.7% (107)	27.9% (64)	229
Webinars facilitated by MCN members	0.9% (2)	9.1% (21)	24.3% (56)	40.4% (93)	25.2% (58)	230
Blog for MCN members to share new ideas, successes, and challenges	2.2% (5)	8.8% (20)	22.8% (52)	43.9% (100)	22.4% (51)	228
Space for community members to post their exemplary projects	2.6% (6)	7.8% (18)	20.0% (46)	47.4% (109)	22.2% (51)	230
Funding for SIGs to hold regional meetings	6.2% (14)	15.5% (35)	31.0% (70)	28.8% (65)	18.6% (42)	226

reinventing the wheel. Respondents cautioned that their interest in certain resources, such as the webinars or videos, would depend largely on the content they covered:

> The webinars, videos, and SIGs may be of interest but it would depend largely on the topic or content more than it being related to MCN. I'm sure that MCN brings together some of interest to myself (sic) and others, though!
> Webinars & videos would be great, my likelihood of using that content depends on the subject.

Several survey respondents were vehemently against the development of new social media tools, arguing that people are stretched enough for time as it is:

> For the love of God PLEASE don't give me another social media portal. Anything that exists beyond Facebook or LinkedIn will make my brain explode.
> We don't need any more social media portals! Use ones that already exist. Just use Twitter to share instead [of] IMV. Re: videos - do people really look at them? I don't think we have the time.

Respondents encouraged MCN to focus on using extant resources more efficiently, instead of inventing new tools that replicate existing resources:

> Twitter already works pretty well as a 'social media portal', and there are also sites like Museum 3.0 that I'd look to find museum professionals on.
> A resurrection of the members-only searchable contact directory would be much more useful than a 'List of contacts' (4b). Rather than another one-off 'Social media portal' (4c),

continued MCN presence in widely used, extant spaces (Facebook, LinkedIn) seems more sustainable and attractive. 'Space for community members to post their exemplary projects' (4e) actually already exists as the MCN Project Registry, but it has fallen into disrepair.

Similarly, while respondents agreed that project repositories (listing successes and failures) could be very helpful, respondents again stressed that it would be most useful if these information resources could be integrated into existing tools:

> Having a repository of (not) success projects, can be a wonderful resource for future research -firstly for museums themselves but also for the greater researchers. I very much support the idea of self-reporting that would lead to (a) sharing ideas, (b) benchmarking, and (c) advancing the field. Ideally, such platform would save resources and increase collaboration.
> Linkedin is already functioning as a blog/space to describe projects. If MCN used it and promoted it among members, would there be a reason to have a separate blog/project space? Having fewer places to go and check what's happening is simpler for members already using LinkedIn.

Finally, there was a strong consensus that social networking tools have the capability to fill the void between conferences, and that MCN should continue to use social media to build relationships among members:

> For me, MCN is a conference. I am aware of it throughout the year because of MCN-L, but I don't engage. I get my fill from the conference and palling around with attendees I've met on Twitter.
> MCN's facilitation of networking is extremely valuable. In addition to the conference, it is helpful to continue the use of Twitter to encourage the proliferation of museum tech industry hashtags and promoting related topics/events. The community itself is very welcoming and engaged, and MCN helps pull people together around topics via social media.

When asked how important it is for an organization like MCN to meet certain needs (Table 5), survey respondents indicated that their most important needs (out of those listed on the survey) included access to current media and technology best practices (94.8%, important or very important), access to information resources (94%, important or very important), awareness of current/future trends in the field (93.5%, important or very important), and information about emerging standards (87.3%, important or very important). MCN's role in providing access to professional networks was also seen as worthwhile (90.5%, important or very important), along with professional development/training opportunities (83.3%, important or very important), and a sense of community (80.8%, important or very important). Approximately, three-quarters of the survey respondents stressed advice on making the most from limited resources (75.2%, important or very important) and practical applications at my place of work (73.4%, important or very important), while approximately two-thirds stressed funding/project opportunities (67.6%, important or very important) and employment assistance/job placement (61.3%, important or very important).

Eight (3%) of the survey respondents commented on the importance of meeting specific needs, and their comments focused primarily on MCN's role as an information provider:

> I see MCN more as information source (where to find the best practice, explanations, resources) and less as provider of services (as funder, teacher). MCN could work as

Table 5. Importance of meeting specific needs.

How important is it for an organization like MCN to meet each of the following needs?	Very unimportant	Unimportant	Neutral	Important	Very important	*n*
Access to current media & technology best practices	0.4% (1)	0.4% (1)	4.3% (10)	28.1% (65)	66.7% (154)	231
Awareness of current/ future trends in the field	0.4% (1)	0.9% (2)	5.2% (12)	37.2% (86)	56.3% (130)	231
Access to information resources	0.4% (1)	0.9% (2)	4.8% (11)	39.0% (90)	55.0% (127)	231
Professional networks	0.4% (1)	0.9% (2)	8.3% (19)	45.7% (105)	44.8% (103)	230
Information about emerging standards	0.4% (1)	1.7% (4)	10.5% (24)	42.8% (98)	44.5% (102)	229
Professional development/ training opportunities	0.4% (1)	2.6% (6)	13.6% (31)	45.6% (104)	37.7% (86)	228
Advice on making the most from limited resources	1.3% (3)	2.6% (6)	20.9% (48)	43.5% (100)	31.7% (73)	230
A sense of community	0.9% (2)	2.6% (6)	15.7% (36)	49.8% (114)	31.0% (71)	229
Practical applications at my place of work	0.4% (1)	5.2% (12)	21.0% (48)	44.1% (101)	29.3% (67)	229
Funding/project opportunities	0.9% (2)	6.9% (16)	24.7% (57)	41.6% (96)	26.0% (60)	231
Employment assistance/job placement	2.6% (6)	7.8% (18)	28.3% (65)	44.3% (102)	17.0% (39)	230

> match maker between institutions and the service providers (funds, training, developers, other institutions). But focus would be on guiding and harmonizing the field - supporting the development of best practice.

Other respondents stressed MCN's role in promoting collaboration and inspiration among its members:

> You forgot – 'Inspiration!' It's great to be inspired by the work everyone is doing!

MCN community benefits

When asked what benefits they feel they obtain from being part of the MCN community (Table 6), survey participants ranked sourcing new ideas, projects, or connections (72.4%); networking/mingling with like-minded professionals in the field (64%); accessing resources that are relevant to my work and/or institution (60%); and attending MCN's Annual Conference (59.1%) as the most important benefits they obtained from MCN. Survey respondents were much less likely to view honing skills

Table 6. Benefits of MCN community.

What benefits do you feel you obtain from being part of the MCN community?	%	*n*
Sourcing new ideas, projects, or connections	72.4	163
Networking/mingling with like-minded professionals in the field	64.4	145
Accessing resources that are relevant to my work and/or institution	60.0	135
Attending MCN's Annual Conference	59.1	133
Honing skills on a regular basis	20.0	45
Other	6.2	14

Note: $n = 225$, respondents were able to select more than one option.

on a regular basis as a significant benefit (20.0%). There were 14 other responses, stressing the importance of best practices and informal knowledge sharing:

> Learning not just about new projects and new technologies but how to use / adopt them, what challenges might be anticipated, and what possible mitigations there might be are extremely important.
> Fostering a general awareness of the issues in the field beyond my own institution.

When asked how MCN could improve upon the services or resources it currently offers, 82 (29%, $n = 283$) of the survey respondents offered suggestions, which covered such topics as the need for professional training and practical information for emerging professionals, collaboration and communication, and strengthening MCN's annual conference and SIGs.

Suggestions for improving professional training and information for emerging professionals included:

> MCN is clearly an organization full of great minds, but in some ways to young professionals and newcomers, this can be intimidating. As a result, conversations tend to be dominated by a small subset of voices. Projects and programs designed to draw out some of the quieter members would really be great.
> There's a definite need for resources for the small museums. I often feel as if there are so many resources out there but as an employee at an institution with around a $300K budget and 6 staff members with no dedicated IT professional, things do not seem as accessible to me.

Suggestions related to improving collaboration and communication included:

> It would be great to think of ways to reach out to a broader audience (curators, conservators, educators, etc.) who would benefit from MCN themes while offering different perspectives to the community.
> Rather than occurring on threaded forums or on the listserv, most discussions among the community (whether or not they're officially organized through MCN) often occur on Twitter as a result of other conferences or hashtag themes. It'd be useful to pull these together in a centralized way on the website as their own resource, so they're easier to find. Likewise, a listing of related wikis would be helpful.

Suggestions on strengthening the MCN conference and SIGs included:

> With multiple conferences/groups targeting the same audience of museum technology professionals (museums and the web, MCN, WebWise, museum-mobile, AAM M&T,

etc), it's sometimes difficult to know where to focus limited time/resources. It would be great if there could be better collaboration amongst these groups.
Often, the hands-on workshops at the annual conference are highly appealing, but because of time constraints and cost we have to make frugal choices. I would value an increase the availability of workshops, for example at regional meetings much like SIGs.

When asked what else MCN could do to meet the needs of its members and community, 51 (18%, $n = 283$) of the survey respondents shared their thoughts, which focused on broadening perspectives to help museum information professionals become better prepared to meet ever-changing information needs, increasing participation by more types of museums and different types of memory institutions, and improving professional development opportunities.

Suggestions to help museum information professionals become better prepared to meet ever-changing information needs in the information society by broadening perspectives included:

Hands on workshops for emerging technologies like Linked Data. Also, I've enjoyed hearing directly from funding agencies on what is important to them. It would be great to follow this model and bring in lawyers to discuss legal issues surrounding museums and new technologies, or information technology professionals to discuss the practical implementation of projects. I know some of this type of content is already provided through MCN conference sessions. I'd be interested in hearing more about these directly from the non-curator, outreach, perspective.
Encouraging conversations between museums/libraries to implement 'realistic' projects. It's wonderful that the larger museums are able to develop their own iphone apps in-house, but cheap and practical projects and success stories from smaller museums would be wonderful to hear more about.

Suggestions to increase participation among individuals from more types of museums and different types of memory institutions included:

I love the MCN community, but sometimes it feels like it is primarily serving the needs of large art museums. I would love to see the community be expanded to encourage more active engagement with others doing work in this area, including more history museums, science centers, children's museums etc. Sometimes it feels like we are just talking to ourselves and I'd like to push us to get out there more.
Perhaps, given limited resources, discounts for membership with SAA (Society of American Archivists) or ALA (American Library Association) to broaden the perspectives from and for library and archives professionals.

Suggestions to focus on professional development opportunities and best practices included:

I think encouraging professionals and institutions to share their standards and best practices would be a practical and very useful resource. Having a collection of standards and/or policies from similar institutions is always something that seems like such a good idea but that doesn't really exist.
Educational tools for the professional development of technology focused workers would be great. I'm from a small museum with no substantial budget for this sort of thing.

The survey findings present a positive attitude toward MCN as a professional organization, and the respondents' comments provide valuable guidance for MCN

and similar organizations as they develop new community outreach efforts. As one respondent commented:

> MCN does wonderful work, particularly listening to the members and responding accordingly to better serve the needs of the field.

Discussion

These survey results provide valuable information about the role of professional organizations in the lives of museum information professionals, and have implications for research and practice that can inform all professional organizations looking for new ways to engage their members and build online communities.

Implications for professional organizations

Museum information professionals clearly desire professional development opportunities from their organizations. They want access to best practices, information resources, new ideas, new connections, and new networks but they neither want nor need the organization to handle these for them directly. The survey results show that professional organizations should provide access to information, as well as the opportunity to make new professional connections, but leave the actual act of connecting up to their members.

There is no need, for example, for an organization to create yet another social media portal to support professional connections, when individuals can simply add new contacts to their Twitter followers. Similarly, there is little reason for an organization to create a new email listserv when members would prefer to follow news on Facebook. Museum information professionals are more interested in having professional organizations seek out and provide access to information than having them set up tools or infrastructures for their use. Indeed, more social media would only be an irritant for many survey respondents.

Providing contacts and connections is desirable, the survey respondents say, 'but let us manage our own social interactions.' This trend reflects the feelings of many museum professionals and users about social media use (Russo and Peacock 2009), and these results resonate with similar findings from other studies. For example, research examining personal, digital collections systems on museum websites found that, while users may want to create digital collections of their favorite artifacts, they would rather do so using generic systems such as Flickr or Facebook than a custom-built system tied to a single museum (Marty 2011). These findings have interesting consequences for professional organizations writ large, in that they indicate what individuals want from professional organizations and, even better, what they do not want.

On the one hand, museum information professionals join organizations because they want to be prepared to meet new problems and challenges as they arise, but given the current economic climate, it can be difficult for people to join many organizations or attend many conferences. Professional organizations can help by organizing regional meetings that provide more localized, and perhaps less expensive, opportunities for networking and professional development. Online meetings such as webinars, for example, offer an effective and inexpensive format for content delivery, and can engage museum information professionals in ongoing conversations about

specific topics year-round. While high-quality content is important, the results indicate that even more important may be the opportunity that such sessions afford to renew and maintain professional connections, and to engage in back-channel conversations with other community members.

On the other hand, museum information professionals do not want organizations to make their lives any more complicated than they already are. The constant worry about a lack of time underlies the desire to use existing social media for keeping in touch with colleagues. It also underlies the idea that the organization's website is primarily a portal to information about the annual conference, and it underlies the relatively low importance assigned to SIGs since maintaining these groups takes a tremendous amount of time that most individuals do not have. Nor are these concerns limited to community members, as many professional organizations are run primarily by volunteers who do not have much free time either. Suggestions to improve community outreach or provide support to members ultimately fall on the shoulders of overworked and underpaid professionals, who rarely have time to update their own museum's Twitter and Facebook pages, let alone start new initiatives for professional organizations.

Implications for future research

The dual nature of these findings poses a challenge to researchers interested in professional organizations. Museum information professionals want organizations to provide access to accurate information resources and timely networking opportunities, but they also want their needs met in a way that does not cause them more work or interfere with their daily routines. Balancing these 'do's and don'ts' can be difficult for professional organizations, since much of the burden for building community and developing new outreach initiatives will ultimately fall on the organization's volunteer leaders. Assessing the best way to balance the needs of the individual with the needs of the organization has implications for future research.

For example, the above results indicate a need for more research that focuses on how to broaden professional organizations to bring in more diversity, including individuals from smaller museums and related communities such as libraries and archives. Given that many museum information professionals join professional communities to broaden their relationships and perspectives, it is important that the organization's membership be as diverse as possible. Professional organizations could benefit from research on the best way to reach underserved communities and engage them in conversations about museums and information technology.

As memberships become increasingly diverse and geographically distributed, professional organizations will need to engage their members through many different information channels. Just as modern museums must maintain multiple, social media outlets (Facebook, Twitter, LinkedIn, Flickr, YouTube, Tumblr, etc.) to ensure they are reaching their audiences, the professional organization needs to bring the community to its members, no matter where they may be. It is no longer sufficient to assume that members will come to the organization seeking a professional community, and new research to determine the best way of managing multiple communication outlets will be necessary to provide guidance to professional organizations. Information provision needs to be an active process, where organizations seek out members and nonmembers alike to distribute information when they need it and where they need it, rather than passively expecting individuals to come to them or their websites for information. For

individuals to access information more efficiently and weave it into their professional practice, organizations need to go where the people are, and consider what they are doing there. Such an approach to information dissemination can also help to reach potential new members, who may follow an organization's Twitter or Facebook feed to keep abreast of relevant information.

Another research avenue would be to replicate this study with other organizations supporting museum professionals. Comparing responses from similar surveys conducted by other museum organizations, with adaptations specific to the individuals each organization serves, could be very informative, and help to address, for instance, whether the respondents in this study – who were predominately female, younger, and relatively inexperienced in the museum field – are representative of museum professionals overall. Additional research could compare the profile of the survey respondents with individuals who actively seek out information and networking opportunities in order to establish themselves and become better prepared for their chosen professions, whatever they may be.

It is also possible that the respondents in this study are as representative of library and information studies (LIS) professionals as they are of museum professionals. If so, this speaks to the need for professional organizations that support museum information professionals to focus their outreach efforts on individuals in the LIS community or related fields who may have not considered museum careers. Research examining how the information needs of current and future museum professionals are being met by professional organizations today could help shape the future of the museum information profession.

Conclusion

Successfully building a community among museum information professionals means that organizations need to offer information that interests their members, be aware of current trends in the field, and provide multiple ways for members to connect with each other. Organizations should be mindful of the time commitments, financial obligations, and professional interests of the individuals they serve, and align their goals to support better how individuals work or network in their everyday lives. As individual needs evolve, professional organizations need to remain flexible, adapting their offerings to the changing needs and interests of their communities over time, and pushing boundaries in ways that move the profession forward.

Although based on a relatively small sample, the above findings indicate that the ability of the professional organization to build community is strongly influenced by the relationship between the individuals (typically volunteers) who run the organization, and the individuals – members and nonmembers – who participate in the organization's activities and take advantage of what the organization has to offer. Based on the results of this research, specific recommendations for professional organizations interested in better engaging current and potential members include:

- offering regional meetings for networking and professional development;
- delivering additional content online via webinars;
- diversifying membership by reaching out to new audiences;
- using information channels such as Facebook, that individuals are already using and are comfortable with, to reach members;

- encouraging members to become actively involved with helping to shape the future of the professional organization; and
- finding ways to motivate members to contribute ideas and information as a way of encouraging public participation.

In conclusion, museum information professionals want organizations to provide the networking connections and information resources they need to succeed at their jobs, without imposing on their day-to-day lives. A strategy that brings the community to the members, rather than the other way around, is likely the best way to encourage individuals to become more involved in a professional community. Despite the inherent challenges of meeting information needs 'where you need it, when you need it,' this approach can help professional organizations to both build community and provide information services for museum information professionals.

Acknowledgments

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