DIGITAL READINESS AND INNOVATION IN MUSEUMS

A Baseline National Survey

October 2020

KF KNIGHT FOUNDATION

HG &CO

Executive Summary

To develop a fuller understanding of digital readiness and innovation maturity in the museum sector, Knight Foundation commissioned HG&Co, a leading cultural sector strategy and research firm, to conduct a field survey. This survey was deployed in partnership with the American Alliance of Museums and captures anonymous data from 480 museums of all sizes across all 50 states. This data includes art museums (30%), historic institutions and sites (38%), science museums (11%) and others. A total of 65% of the institutions who responded with size information were defined as small museums, meaning they have annual budgets of $5 million or less, or have fewer than 49 employees.

As these data were collected prior to the spread of COVID-19, findings shine a light on the status of digital innovation in the field prior to the crisis, but also identify both challenges and opportunities that might exist in building capacity for resiliency as the cultural landscape changes.

Key takeaways:

- **Dedicated digital staffing is severely limited:** Half of the institutions who responded, including 43% of art museums, had either no dedicated digital staff or this department was represented by a single individual. Medium-size institutions ($5–20 million annual budget) were twice as likely to report digital development teams in-house as smaller institutions.

- **Digital strategies are still emergent:** When asked, 31% of museums admitted they had no digital strategy while another 29% said theirs was in development. Only 25% have a shared digital strategy or incorporate one into their overall strategic plan.

- **Digital projects are mostly siloed and outcomes poorly tracked:** Approximately half (51%) of museums report that individuals or single departments conduct planning focused on a single project. Only 7% report projects being driven by a cross-functional group, but 18% say their planning is starting to bridge across areas. In addition, 41% of museums do not have any defined goals, KPIs or outcome measures for digital projects, and another 37% do so only on an ad hoc basis.

- **Leadership support is high for digital projects:** Just under half (44%) report strong leadership knowledge of and support for digital projects, including that digital leaders are a part of senior leadership teams. Across all museums, 11% say digital leaders are a part of senior leadership teams, which drops to 9% for art museums.

- **Audience insights are shallow or poorly integrated:** While 54% of museums report capturing basic feedback or demographics, only 18% are using audience data to shape efforts and offerings.

Foreword from Knight Foundation

We are waking up to a changed landscape.

When Knight Foundation commissioned a survey focused on digital innovation in museums last year, we could not have predicted a global pandemic, that museums would be among the hardest hit by the ensuing economic crisis, or that this would be the moment when the national reckoning around racial justice would finally force institutions to examine the role they play in perpetuating forms of oppression. Suddenly, the capacity for digital innovation has become more critical than ever as museums scramble to find new ways to connect with the public.

Museums are sources of inspiration and understanding. Through exhibitions, education and programming they provide not just content, but more importantly, context. They put a lens on the world that helps us gain a better understanding of ourselves and each other. And as they work to connect and inspire communities, the world in which they exist has changed. Sometimes, we ask that the lens itself be reexamined.

Out of that change, we hear echoes of an old proverb: "Necessity is the mother of invention." Institutions of all sizes are reevaluating how to deliver on their missions and staff are responding with an outpouring of creativity. This is the heart of innovation: the human ability to overcome obstacles, to create, to connect. It requires a willingness to experiment and radical permission to create value for those who we serve. It asks us to dig deep and find the authentic.

As a social investor, Knight Foundation supports the transformative application of technology for social and cultural impact. With a focus on arts and technology, we have helped museums and other cultural institutions begin to build the muscles needed to find success and engage audiences through technology. We believe that investment in digital capacity and innovation in the arts can help organizations reach audiences where they are, allow organizations to deliver on their missions in new ways and help organizations become more resilient in a rapidly changing and uncertain world. We remain committed to this work now more than ever.

As we have learned from our own grantmaking and from adjacent fields, we have started to observe which capabilities and qualities an organization might build to increase their chances of success with technology investments. Through assessments of our museum technology grants and work with partner museums, we have identified key areas museums might focus on to improve audience value with technology.

Assessments by the consulting firm MACHINE and further refinements by the Boston Consulting Group are the genesis for the digital readiness attributes explored in this survey. They focus on critical areas of organizational competency that can impact an organization's ability to apply technology solutions to mission-related goals. These areas of organizational competency include people/staffing, strategic integration, adoption of practices and processes, and the ability to utilize audience insights.

While much of the report looks at a structured approach to innovation, the journey of individual organizations will often be more organic. Institutions must consider technology investment alongside other critical priorities, like equity, financial sustainability and mission-alignment. We hope this report provides some guideposts as cultural institutions make decisions about how to build out their digital capacity.

Introduction

An evolution of cultural institutions in the United States is occurring on many fronts, including a deeper awareness of audience needs, grappling with lack of diversity both within organizations and in offerings to the public, how and when institutions respond to changing dynamics, and the state of digital adoption and adaption. This evolution is highly uneven across institutions. Innovation spurs the creation of value to communities through the development of new experiences, services and processes. Knight is specifically interested in fostering the use of digital to build audiences and members, and to craft innovative visitor experiences.

Based on that approach, Knight Foundation, in collaboration with the American Alliance of Museums (AAM), commissioned this survey from the museum research and evaluation firm HG&Co. The survey launched in the fall of 2019, and received responses from hundreds of museum professionals across the United States representing 480 arts institutions, history museums and historical sites, natural history museums, science centers, and specialty museums. This research explores where museums of various sizes stand on a set of attributes that foster and support a digitally innovative museum.

Notably, the data from this survey was collected prior to COVID-19 appearing in the United States. The museum field has experienced enormous tumult during the ensuing shutdown for public health safety, including layoffs, furloughs, and closures during which many museum experiences moved online. The survey was conducted last fall, well before the COVID-19 pandemic began, and therefore provides insight into the state of the museum sector as it entered this period.

Digital Innovation Attributes

To examine digital innovation, the survey explores a series of digital capabilities grounded in Knight's yearslong work in digital innovation across arts institutions and is informed by thinking from MACHINE, Boston Consulting Group and others. While the Knight Foundation's focus is on the arts, the information within this survey should be useful to a broader set of museums.

These attributes are divided into roughly five broad categories: Strategy, People, Practices, Audience, Partnerships. Each category has subcomponents that are examined in various states of growing capacity.

		Untapped	Emergent	Realized
STRATEGY	**Strategy creation and dissemination**	• No digital strategy yet, may be considering one	• Digital strategy may be developed but not broadly shared	• Digital strategy shared broadly across museum, may be included within overall strategic plan
	Goals development and outcomes tracking	• Do not have defined goals or KPIs (Key Performance Indicators) and/or do not measure the outcomes	• Some defined goals or KPIs and some measured outcomes	• Regularly track against goals and KPIs with real-time integrated data
	Cross-institutional planning of digital projects	• Little to no planning for digital, primarily reactive	• Planning by individuals or individual departments and centered on specific projects	• Multiple groups or individuals feed into the planning and prioritization of digital
PEOPLE	**Internal expertise**	• No dedicated technology positions, or positions that mostly provide maintenance	• Growing internal digital technology positions	• Digital software and technology development teams in-house
	Leadership support	• Leadership is fairly uninformed about digital project uses, but open to potential	• Leadership is mostly knowledgeable and supportive of digital projects	• Digital leaders are part of senior leadership team and proactively advocate for digital projects
	Silos	• Digital projects are primarily the work of a single individual	• Many departments are involved with digital projects	• Digital software and technology development teams in-house
PRACTICES	**Integration of digital**	• Digital projects are scattered around the organization	• Completed successful museum-wide digital initiatives that are in use	• Robust digital teams that have sufficient budgets and can support full product lifecycles
	Project managers	• Little to no formalized project management practices or project manager roles	• Some dedicated project managers for digital projects	• Multiple project managers focused on digital throughout the organization
	Innovation processes	• Not using innovation processes; may be aware of these tools but rarely use them	• Some common practices, including agile experiments and some user-centered design	• Regularly use innovation processes as part of work flows
AUDIENCE	**Audience research**	• No audience evaluation at any stage	• Gathers basic demographics • Incorporates at least one of the following: community-focused listening, iterative evaluation or strategic evaluation	• Gathers basic demographics • Incorporates a mix of the following: community-focused listening, iterative evaluation or strategic evaluation • Regular impact evaluation
PARTNERSHIPS	**External partnerships**	• No external partnerships	• A few external partnerships on specific one-off digital projects	• Enduring external partnerships with multiple organizations that support both strategic and operational objectives

This is not intended to be one-size-fits-all approach. Indeed, the survey demonstrated how the size of the institution often determined their level of capability. Survey feedback indicated that institutions are necessarily idiosyncratic in their approaches to digital.

The survey intention is to explore certain factors that may contribute to cultural institution digital innovation, with the aim of furthering a deeper conversation around creating an environment for innovation, both more nuanced and more actionable.

Summary of Findings

Size: Institution size is a driving factor when it comes to digital readiness

Size was the defining variable of the survey results. Size of institution was often, but not always, impacting the institutional approach to innovation. This points to potential priority areas for increasing digital innovation.

- What separates small institutions from larger institutions in digital innovation capacity is dedicated staff with skills. Smaller institutions are just as likely as medium-size institutions to be engaged in digital practices and thinking about digital strategy. In fact, small history and science organizations are more likely to be engaged in some form of audience research than small arts organizations. However, smaller institutions consistently lack staff that can build institutional knowledge and collaboration over digital.

- Medium-size institutions lack staffing and cross-institutional work, along with digital practices. Yet the factor that separates medium-size institutions most strongly from larger institutions is in strategy. Large arts institutions are almost twice as likely to have stronger strategic elements in place than medium-size arts institutions.

The sample size for larger non-arts institutions hampers our ability to examine these factors within larger institutions, yet the data clearly shows large institutions are a long way from realizing their digital innovation capacity.

Arts institutions: Strong partnerships, lagging in people and audience alignment

- Arts institutions have strong partnerships, emerging strategy and emerging practices. They lag other types of institutions in audience alignment, and smaller arts organizations struggle with having specific individuals dedicated to digital, which leads to a lack of understanding and collaboration on digital projects institution-wide. Arts institutions are less likely to do work to understand and design for audience needs than science, history or other institutions.

People: While digital staffing remains limited, leadership support is high

- Dedicated digital staffing is quite limited. Half of the institutions who responded, including 43% of art museums, had either no dedicated digital staff or a single individual. If institutions do have digital staff, these are more likely to be IT staff who focus specifically on maintenance rather than development. Medium-size and larger institutions are more likely to have digital development teams, though they may still outsource creative software development.

- Leadership self-reports high support for digital. Just under half of the institutions reported museum leadership is knowledgeable and supportive of digital projects. Across all museums, 11% say digital leaders are a part of senior leadership teams, but that drops to 9% for art museums. One caveat: the individuals filling out this survey were more likely to be leadership, and therefore more likely to rate themselves as knowledgeable and supportive.

Figure 1: Most small and medium-size arts organizations lack digital staff*

Legend:
SM= small
MD= medium
LG= large**

	SM	MD	LG
No staff or just one individual	62%	18%	10%
Few staff, mostly provide maintenance	8%	27%	17%
Internal technology positions and outsource creative software development	11%	38%	41%
In-house digital software and technology development teams	6%	6%	24%
Robust digital teams with sufficient budgets and can support full product lifecycles	3%	3%	0%
I don't know / I'm not sure	0%	0%	7%
Other	10%	8%	0%

* These data are combined from two separate questions.
** Small sample size in all large institution categories.

Strategy: Digital planning is a work in progress and outcomes poorly tracked

- Digital strategy within institutions is still emergent. When asked, 31% of museums shared they had no digital strategy while another 29% said they were currently discussing or developing such a strategy. Nearly 25% of museums overall have a broadly shared digital strategy or incorporate one into their overall strategic plan, including 19% of art museums. Science museums are more likely to have a digital strategy, though it may be unevenly applied. This means that most organizations are operating tactically versus strategically when it comes to digital.

- We asked whether institutions had a framework to support the planning and coordination of digital practices and innovation within the museum. Digital planning is mostly siloed and the project approach is scattered across the institution. About half (51%) report that individuals or single departments conduct planning focused on a single project. While 11% say most departments are involved in digital projects, only 7% report planning for such projects being driven by a cross-functional group, but 18% say their planning is starting to bridge across areas and touch museum-wide efforts.

- Development of clear, measurable goals is a weak point and outcome tracking is spotty: 41% of museums do not have any defined goals, KPIs or outcome measures for digital projects, and another 37% do so only on an ad hoc basis. In art museums, only 16% define and gather outcome data to measures results, including 3% who have implemented real-time tracking.

Figure 2: Percent of museums who have not defined goals and/or do not measure outcomes

Art	History	Science	Zoo/Garden	Other	Museums overall
40%	46%	32%	36%	41%	41%
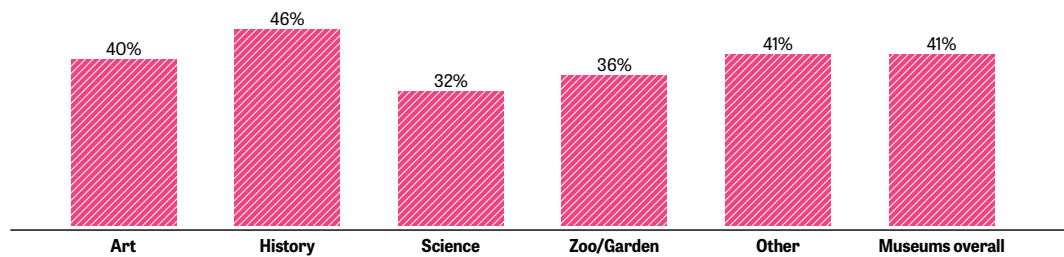
Figure 3: Outcomes measurement by size of institution

SM= small
MD= medium
LG= large

	No defined goals or KPIs and/or do not measure outcomes			Some defined goals or KPIs and measure outcomes on an ad hoc basis			Define goals at the outset of a project and gather data at key moments to measure results		
	SM	MD	LG	SM	MD	LG	SM	MD	LG
	45%	35%	14%	35%	47%	45%	9%	6%	21%
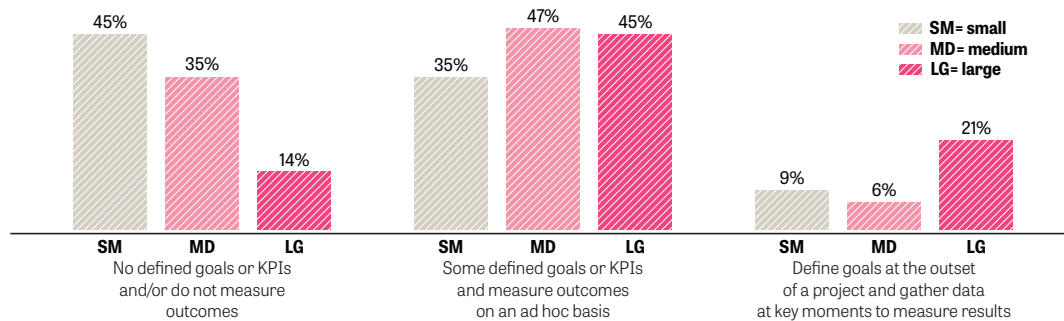
Practices: Digital planning is a work in progress and outcomes poorly tracked

- A key gap is project management. Nearly one-third (29%) of all museums report little to no formalized project management practices or project manager roles. Another 40% note that while their organization has project management, it is unevenly applied across projects. No one type of institution is excelling at project management—65% of art museums, 75% of history museums and 52% of science organizations report little to no or uneven project management. While large institutions are more likely to have dedicated project management, it remains the exception rather than the rule.

Figure 4: Project management is nonexistent or uneven

Legend:
- Little to no formalized project management practices or project manager roles
- Project management is unevenly applied to projects

Category	Little to no formalized project management	Unevenly applied
Art	24%	41%
History	35%	40%
Science	15%	37%
Other	30%	37%
Museums overall	29%	40%
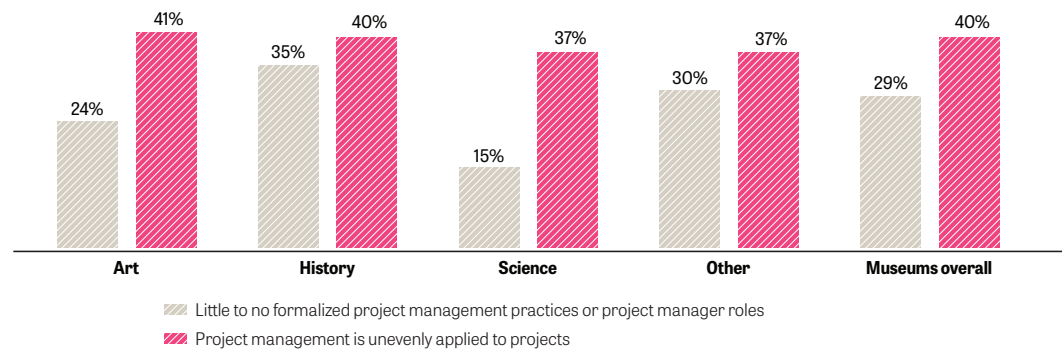
- Standardized, cross-institutional digital workflows and practices, including agile practices, were fairly rare for institutions and generally only occur with the largest of museums. Only 5% of art museums report regular use of such practices.

- Over one-third of the responding organizations did not use innovation practices such as human-centered design, co-creation, prototyping, iteration and user testing. Another 21% were aware of these approaches but did not use them, and 23% had experimented with these approaches but had not institutionalized them. Just ten percent of arts institutions regularly used such processes. Hands-on practice with these tools may move some institutions from knowing about the ideas to both an understanding of how to implement them and stronger interest in doing so.

Audience alignment: Only the most basic audience-centric effort is common; arts institutions lag behind other museum types

- Lack of audience research was endemic across museum types. Less than 25% of museums reported having audience research processes in place like community feedback, co-creation and impact evaluation. Similarly, 78% of institutions do not set goals and outcomes at the beginning of a project or systematically examine the impact of their work, which undermines the ability to design for audience needs or evaluate success of digital projects.

- Understanding the motivation and needs of one's audience is at the heart of both human-centered design and user-centered products. Audience research and evaluation are often perceived as nice to have, rather than as necessary tools of goal-setting and commitment to audience. The majority of smaller and medium-size institutions do collect basic demographic data, and they are more likely than large organizations to do community-based audience work such as stakeholder listening, co-creation or community feedback. While less likely to do community-based audience research, larger institutions are more likely to do strategic or impact evaluation. Nonetheless, the field overall lags in audience work, as a majority of institutions do not engage in more than the most basic zip code gathering.

Figure 5: Few institutions engage in audience research

	Art	History	Science
Anecdotal Data	14%	26%	9%
Basic Feedback	54%	55%	50%
Community-based Evaluation	17%	19%	12%
Iterative Evaluation	4%	9%	12%
Strategic Evaluation	15%	16%	27%
Impact Evaluation	12%	9%	15%

Closing Reflection

This study was an exploratory one, and the digital innovation attributes covered in this survey are previously untested in the museum sector. Findings show the vast majority of museums are struggling with most of these capacities, with smaller institutions struggling to a much greater degree. Small and medium-size institutions simply lack staffing to tackle digital planning and development. Professional development opportunities and national conferences are difficult for professionals from smaller institutions to attend, exacerbating the lack of digital capacity within museums. The lack of audience research, iteration and co-creation of most cultural institutions surveyed is yet another indicator that museums still have work to do in order to truly serve their communities, especially when their staff, boards and funders do not reflect the demographics of the communities they serve.

This study highlights not just gaps in innovation processes, but also in digital strategy, project management, developing and measuring goals, incorporating digital within the core work of the museum, and audience research. Growing the museum digital innovation field requires growing the number of people with these capabilities who can move up the ladder within organizations. Currently, this pipeline does not exist. Smaller institutions may bring in talented individuals, but those individuals frequently lack the capacity and skills to advance digital programming institution-wide. Capacity-building in smaller institutions benefits the museum, the individual and the institutions they go on to work with throughout their career.

Additionally, significant attention in the digital world is paid to large-scale marquee projects. The budget, staffing and resources for these projects set unrealistic benchmarks for many institutions and do not help smaller institutions grow capacity. Examples of digital strategies, effective project management, and strategies to build key capabilities specifically formulated for smaller institutions would support these institutions in taking the next step.

In this uncertain and truly difficult time for cultural institutions, the pandemic is forcing many institutions to adopt new ways of designing programs and exhibitions, and centering digital outreach as a core museum activity. Constructing cross-departmental teams to focus on digital, and providing training for that effort, will enable museums to be more resilient to a hybrid in-person/online dynamic that may become commonplace in the next few years.

APPENDIX A: METHODOLOGY, BIAS AND SAMPLE

Methodology

The Knight Foundation, in collaboration with the American Alliance of Museums (AAM), commissioned a survey on the current practices of digital innovation within museums. To this end, Knight Foundation engaged HG&Co, a visitor-centered planning, strategy and evaluation firm within the cultural sector. HG&Co adapted the scales developed by the Knight Foundation and MACHINE, and AAM sent a request to fill out this survey to senior members of hundreds of AAM-registered institutions. We focused on institutions that did not have living collections, as those institutions have substantially different needs.

As multiple individuals within a single institution were allowed to respond, we averaged the ratings of the individuals within an institution, rounding "up" when there was a discrepancy. Our examination of size was based on the number of full-time equivalent positions and budget as reported to AAM, as some institutions had provided only either budget figures or number of staff. Budget and staff are self-reported, and might reflect information from a prior year. Nearly half of the museums provided no budget or size of staff to AAM, and therefore those institutions were left out of the size-based analysis.

Bias

The data and interpretation within this analysis should be seen as the first exploratory step toward describing the capacity of the museum field, rather than as definitive. There are a number of significant biases within the data. First, the majority of individuals filling out the survey were senior staff, who may wish to present their institution in the most optimistic light. Second, our size and typology of museums is based on self-reported data, and many institutions choose not to provide data. Over half of the institutions did not provide staff size or budget data, so those institutions are not reflected in the size-based crosstabs. Correlations by size therefore are rough at best.

Perhaps most important to keep in mind when reviewing these data is the framework itself for digital innovation is still emergent and subject to debate. The set of attributes incorporated within this survey draws significantly from corporate technology innovation, which has different goals and practices than the museum field. The scaling on this survey implies a progression that may not be viable or useful for a particular museum. As we as a field further develop our collective thinking on what digital innovation is and is not, the framework will evolve. As of now, this survey has both reliability and validity issues. Nonetheless, we feel it is a useful first step for furthering a conversation, and we welcome your thoughts in that conversation.

Sample

A total of 584 museum staff responded from 476 museums, from all 50 states and from Washington, DC, and Puerto Rico. The three states with the most museums represented within the sample are California (48), New York (38), and Illinois (28). Three museums responded from outside the United States and we removed these organizations from the sample. Multiple individuals were allowed to respond from the same institution. In 58 institutions more than one staff member submitted a survey; 418 institutions had a single response from staff. The maximum number of staff responses from a single institution was thirteen.

The majority of the institutions who responded were in urban settings, though small towns also accounted for a significant portion of the sample.
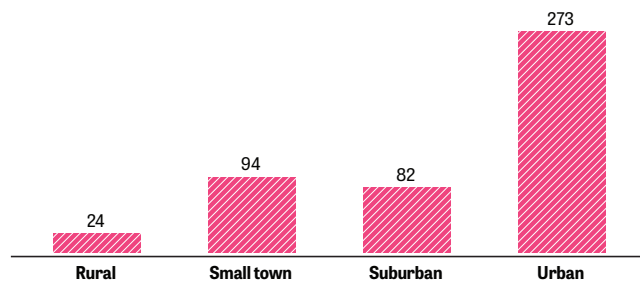
Size

Size was a defining variable for the data, as smaller institutions were much less likely to have the staffing or practices to embody a digitally innovative approach.

Small: Up to $5M annual budget and/or up to 49 FTEs

Medium: $5–20M annual budget, 50–150 FTEs

Large: $20–50M annual budget, 100+ FTEs
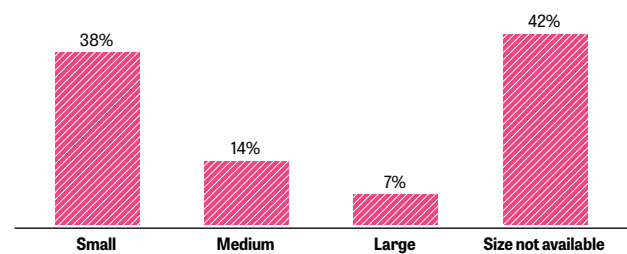
Type of Institutions in Sample

Over one-third of the sample was made up by history institutions and historic sites. Art museums, sculpture gardens and related institutions made up 30% of the sample. Science institutions, including natural history museums, responded at a lower rate, 11%. There were many other types of institutions in the sample, including transportation museums, anthropology museums, children's museums, and more.

Art	History	Science	Zoo/Garden	Other
30%	38%	11%	3%	18%
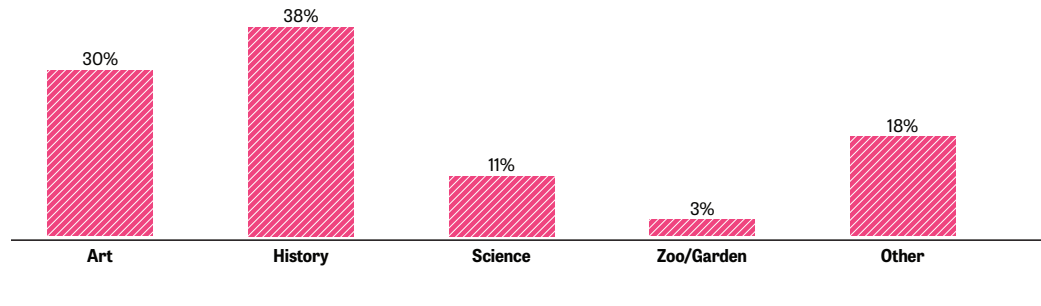
Detail of Type of Museum in Sample

History museums are the most numerous type of museum within the United States, and they are likely to be smaller institutions. AAM's membership is disproportionally represented by art museums, which explains the larger art museum response rate.

Art museum or center/Sculpture garden	29%
History museum	20%
Historic site/Historic landscape	10%
Specialized museum: multi-topic	8%
Science/technology center or museum	5%
Natural history museum	4%
Specialized museum: single topic	4%
Historical society	4%
Children's museum	3%
Ethnically/culturally/tribally specific	3%
Garden/arboretum/nature center	3%
Other	8%
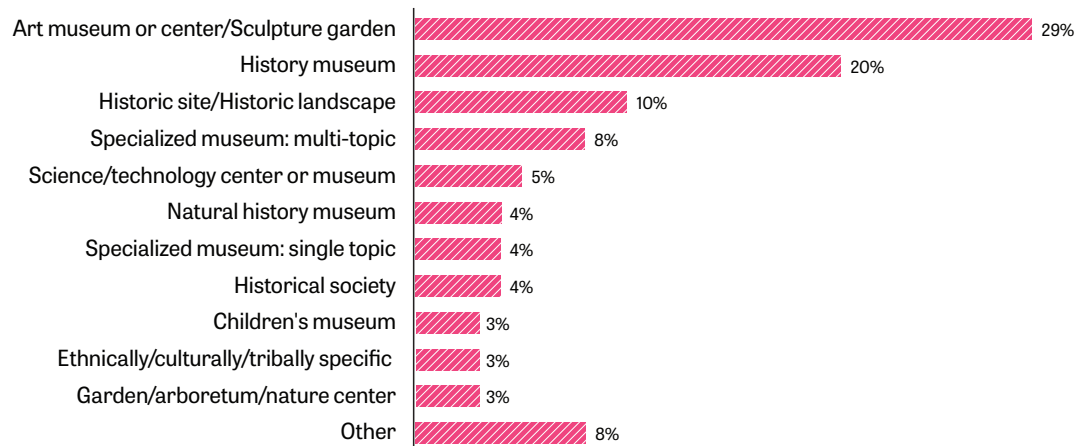
Size of Institutions by Type

Over 80% of the history institutions responding were small or very small. More than 50% of art institutions and other institutions responding were small or very small, meaning budgets under $5 million and fifty or fewer full-time equivalent employees. One quarter of art museums and over fifty percent of all history institutions who responded had an annual budget of $400,000 or under and 10 or fewer full-time equivalent staff. Only 1% of the history institutions responding could be considered large. Science institutions were more likely to be medium-size or larger.

APPENDIX B: TOPLINE SURVEY CHARTS

The pages that follow present the survey results for the museum categories below. This table indicates the number of responses per category. Please interpret results from small sample sizes with caution.

	Number of Responses
Overall	**473**

Size	
Small	180
Medium	67
Large	30
SNA	196

Type	
Art	140
History	180
Science	52
Zoo/Garden	15
Other	86

Detailed Size and Type	
Art	
Small	73
Medium	29
Large	16
SNA	22
History	
Small	69
Medium	13
Large	1
SNA	97
Science	
Small	11
Medium	10
Large	5
SNA	26
Zoo/Garden	
Small	3
Medium	2
Large	4
SNA	6
Other	
Small	24
Medium	13
Large	4
SNA	45

SNA= Size not available

Does your museum have dedicated digital project teams?

	Sample Size	We have no dedicated technology positions or we have one individual.	We have a few technology positions which mostly provide maintenance.	We have internal technology positions and outsource creative software and technology development.	We have digital software and technology development teams in-house.	We have robust digital teams that have sufficient budgets and can support full product lifecycles.	I don't know / I'm not sure.	Other
Overall	462	50%	11%	19%	8%	3%	1%	8%
Size								
Small	176	62%	8%	11%	6%	3%	0%	10%
Medium	66	18%	27%	38%	6%	3%	0%	8%
Large	29	10%	17%	41%	24%	0%	7%	0%
SNA	191	56%	8%	16%	7%	3%	2%	8%
Type								
Art	138	43%	10%	23%	11%	3%	1%	8%
History	176	59%	8%	17%	3%	2%	1%	10%
Science	50	36%	20%	20%	12%	4%	4%	4%
Zoo/Garden	14	43%	14%	29%	7%	0%	0%	7%
Other	84	52%	14%	12%	10%	4%	0%	8%
Detailed Size and Type								
Art								
Small	72	57%	6%	10%	8%	6%	0%	14%
Medium	29	21%	24%	45%	7%	0%	0%	3%
Large	16	6%	13%	44%	25%	0%	13%	0%
SNA	21	57%	5%	24%	14%	0%	0%	0%
History								
Small	68	68%	7%	12%	3%	1%	0%	9%
Medium	12	25%	25%	33%	8%	8%	0%	0%
Large	1	0%	0%	100%	0%	0%	0%	0%
SNA	95	57%	6%	18%	3%	1%	2%	13%
Science								
Small	10	70%	10%	10%	10%	0%	0%	0%
Medium	10	0%	40%	40%	10%	10%	0%	0%
Large	5	20%	40%	20%	20%	0%	0%	0%
SNA	25	40%	12%	16%	12%	4%	8%	8%
Zoo/Garden								
Small	3	67%	33%	0%	0%	0%	0%	0%
Medium	2	0%	0%	50%	0%	0%	0%	50%
Large	3	0%	0%	67%	33%	0%	0%	0%
SNA	6	67%	17%	17%	0%	0%	0%	0%
Other								
Small	23	57%	13%	13%	9%	0%	0%	9%
Medium	13	23%	31%	23%	0%	0%	0%	23%
Large	4	25%	25%	25%	25%	0%	0%	0%
SNA	44	61%	9%	7%	11%	7%	0%	5%

SNA= Size not available

Does your museum have a digital strategy?

	Sample Size	No, we do not.	We are discussing having a digital strategy, but haven't fully crafted one yet.	We do have a digital strategy for the museum but it is not broadly shared.	We have a digital strategy for the museum that is shared across the organization.	We do not have a separate digital strategy, but instead incorporate those issues into our main strategic plan.	I don't know / I'm not sure.
Overall	462	31%	29%	11%	10%	15%	6%
Size							
Small	176	39%	32%	7%	9%	10%	3%
Medium	66	18%	35%	15%	6%	17%	9%
Large	29	14%	34%	28%	10%	7%	7%
SNA	191	29%	24%	10%	11%	19%	7%
Type							
Art	138	28%	31%	13%	10%	9%	8%
History	176	35%	27%	7%	10%	17%	4%
Science	50	18%	26%	20%	8%	18%	10%
Zoo/Garden	14	29%	29%	14%	7%	7%	14%
Other	84	32%	31%	8%	10%	17%	2%
Detailed Size and Type							
Art							
Small	72	36%	35%	7%	11%	7%	4%
Medium	29	24%	24%	14%	7%	17%	14%
Large	16	13%	31%	31%	13%	6%	6%
SNA	21	19%	29%	19%	10%	10%	14%
History							
Small	68	38%	31%	4%	7%	15%	4%
Medium	12	17%	33%	33%	17%	0%	0%
Large	1	0%	100%	0%	0%	0%	0%
SNA	95	36%	23%	5%	11%	21%	4%
Science							
Small	10	40%	40%	10%	10%	0%	0%
Medium	10	10%	60%	10%	0%	10%	10%
Large	5	20%	20%	40%	0%	20%	0%
SNA	25	12%	8%	24%	12%	28%	16%
Zoo/Garden							
Small	3	33%	33%	33%	0%	0%	0%
Medium	2	0%	0%	0%	0%	50%	50%
Large	3	33%	0%	0%	33%	0%	33%
SNA	6	33%	50%	17%	0%	0%	0%
Other							
Small	23	52%	22%	9%	9%	9%	0%
Medium	13	15%	46%	8%	0%	31%	0%
Large	4	0%	75%	25%	0%	0%	0%
SNA	44	30%	27%	7%	14%	18%	5%

SNA= Size not available

Does your leadership actively support digital projects?

	Sample Size	Our senior leadership believes technology is a distraction from the core content of the museum.	Our senior leadership is fairly uninformed about digital project uses, but is open to the potential.	Our leadership is somewhat knowledgeable about our digital projects.	Our leadership is both knowledgeable and supportive of our digital projects.	We have digital leaders as part of our senior leadership team who proactively advocate for our digital projects.	I don't know / I'm not sure.
Overall	462	3%	22%	26%	33%	11%	6%
Size							
Small	176	2%	24%	22%	36%	9%	6%
Medium	66	0%	11%	41%	30%	11%	8%
Large	29	0%	10%	31%	41%	14%	3%
SNA	191	4%	25%	24%	29%	13%	5%
Type							
Art	138	2%	19%	27%	36%	9%	7%
History	176	2%	21%	26%	36%	11%	5%
Science	50	4%	18%	32%	24%	18%	4%
Zoo/Garden	14	0%	57%	7%	21%	7%	7%
Other	84	4%	25%	26%	29%	11%	6%
Detailed Size and Type							
Art							
Small	72	1%	21%	26%	36%	7%	8%
Medium	29	0%	14%	34%	38%	7%	7%
Large	16	0%	6%	25%	44%	19%	6%
SNA	21	10%	29%	19%	24%	14%	5%
History							
Small	68	1%	26%	19%	40%	9%	4%
Medium	12	0%	0%	42%	42%	8%	8%
Large	1	0%	0%	100%	0%	0%	0%
SNA	95	3%	20%	27%	33%	13%	4%
Science							
Small	10	10%	10%	20%	40%	20%	0%
Medium	10	0%	10%	60%	10%	20%	0%
Large	5	0%	20%	40%	20%	20%	0%
SNA	25	4%	24%	24%	24%	16%	8%
Zoo/Garden							
Small	3	0%	100%	0%	0%	0%	0%
Medium	2	0%	0%	0%	0%	50%	50%
Large	3	0%	33%	0%	67%	0%	0%
SNA	6	0%	67%	17%	17%	0%	0%
Other							
Small	23	4%	26%	22%	30%	9%	9%
Medium	13	0%	15%	46%	23%	8%	8%
Large	4	0%	0%	50%	50%	0%	0%
SNA	44	5%	30%	20%	27%	14%	5%

SNA= Size not available

How broadly are digital projects spread within the organization?

	Sample Size	Digital projects are primarily the work of a single individual.	Digital projects are scattered around the organization.	There have been initial attempts to link digital projects across the organization.	Many or most departments are involved with digital projects.	We have completed successful museum-wide digital initiatives that are in use.	I don't know / I'm not sure.
Overall	462	19%	38%	12%	11%	13%	6%
Size							
Small	176	22%	36%	13%	9%	15%	6%
Medium	66	5%	52%	11%	15%	12%	6%
Large	29	3%	28%	17%	24%	28%	0%
SNA	191	25%	38%	12%	9%	10%	6%
Type							
Art	138	14%	37%	12%	11%	19%	7%
History	176	25%	38%	13%	8%	11%	6%
Science	50	14%	50%	12%	14%	8%	2%
Zoo/Garden	14	29%	43%	7%	7%	7%	7%
Other	84	18%	35%	12%	15%	14%	6%
Detailed Size and Type							
Art							
Small	72	21%	35%	10%	8%	18%	8%
Medium	29	3%	55%	7%	10%	17%	7%
Large	16	6%	13%	19%	19%	44%	0%
SNA	21	14%	38%	24%	14%	5%	5%
History							
Small	68	22%	38%	18%	9%	9%	4%
Medium	12	0%	50%	25%	8%	17%	0%
Large	1	0%	0%	0%	100%	0%	0%
SNA	95	31%	36%	8%	6%	12%	7%
Science							
Small	10	20%	30%	20%	0%	30%	0%
Medium	10	10%	70%	10%	10%	0%	0%
Large	5	0%	40%	20%	40%	0%	0%
SNA	25	16%	52%	8%	16%	4%	4%
Zoo/Garden							
Small	3	100%	0%	0%	0%	0%	0%
Medium	2	0%	0%	0%	50%	0%	50%
Large	3	0%	100%	0%	0%	0%	0%
SNA	6	17%	50%	17%	0%	17%	0%
Other							
Small	23	13%	39%	4%	17%	17%	9%
Medium	13	8%	38%	8%	31%	8%	8%
Large	4	0%	25%	25%	25%	25%	0%
SNA	44	25%	32%	16%	9%	14%	5%

SNA= Size not available

How integrated are your museum's technology systems and processes? Do various systems such as Content Management Software, Digital Assets Management Software, and Customer Relationship Management work well together?

	Sample Size	There is no intentional integration.	We have done brute-force integration between systems, or attempted to do so.	Our integration is complete, including people and technology, and there is an understanding of common paradigms.	Our integration is in practice and is well-defined and documented.	Our integration is in practice and documented, and also enables a real-time and seamless experience.	I don't know / I'm not sure.	None of the above / I don't know.
Overall	422	49%	32%	6%	3%	1%	8%	1%
Size								
Small	161	55%	27%	5%	3%	1%	8%	0%
Medium	62	40%	40%	5%	5%	2%	3%	5%
Large	29	21%	52%	14%	3%	0%	10%	0%
SNA	170	51%	29%	6%	2%	2%	9%	0%
Type								
Art	129	42%	40%	5%	6%	2%	5%	0%
History	156	55%	24%	7%	2%	1%	10%	1%
Science	47	49%	32%	4%	2%	4%	6%	2%
Zoo/Garden	14	36%	29%	14%	0%	0%	21%	0%
Other	76	50%	34%	5%	1%	0%	9%	0%
Detailed Size and Type								
Art								
Small	67	52%	30%	3%	4%	3%	7%	0%
Medium	27	30%	52%	7%	11%	0%	0%	0%
Large	16	13%	63%	13%	6%	0%	6%	0%
SNA	19	47%	42%	5%	5%	0%	0%	0%
History								
Small	60	57%	23%	8%	2%	0%	10%	0%
Medium	11	55%	18%	0%	0%	9%	0%	18%
Large	1	0%	100%	0%	0%	0%	0%	0%
SNA	84	55%	24%	7%	2%	1%	11%	0%
Science								
Small	10	40%	50%	0%	0%	0%	10%	0%
Medium	9	33%	56%	0%	0%	0%	0%	11%
Large	5	40%	20%	20%	0%	0%	20%	0%
SNA	23	61%	17%	4%	4%	9%	4%	0%
Zoo/Garden								
Small	3	67%	0%	33%	0%	0%	0%	0%
Medium	2	50%	0%	0%	0%	0%	50%	0%
Large	3	33%	0%	33%	0%	0%	33%	0%
SNA	6	17%	67%	0%	0%	0%	17%	0%
Other								
Small	21	67%	24%	0%	5%	0%	5%	0%
Medium	13	54%	31%	8%	0%	0%	8%	0%
Large	4	25%	75%	0%	0%	0%	0%	0%
SNA	38	42%	37%	8%	0%	0%	13%	0%

SNA= Size not available

Is there a framework to support the planning and coordination of digital practices and innovation within the museum?

	Sample Size	There is little to no planning for digital, as everything is reactive.	Planning is primarily by individuals or individual departments and is centered on specific projects.	Planning starts to bridge across areas and focus on museum-wide efforts.	Digital planning and prioritization is driven by a cross-departmental group.	Multiple groups or individuals feed into the planning and prioritization of digital on an ongoing basis.	None of the above / I don't know.
Overall	422	17%	51%	18%	7%	4%	3%
Size							
Small	161	18%	53%	18%	4%	4%	2%
Medium	62	15%	47%	19%	13%	3%	3%
Large	29	3%	38%	41%	14%	3%	0%
SNA	170	19%	54%	14%	6%	5%	3%
Type							
Art	129	17%	49%	20%	10%	3%	1%
History	156	17%	56%	15%	4%	4%	3%
Science	47	11%	49%	23%	9%	2%	6%
Zoo/Garden	14	7%	71%	0%	14%	7%	0%
Other	76	21%	43%	21%	7%	5%	3%
Detailed Size and Type							
Art							
Small	67	19%	52%	16%	7%	3%	1%
Medium	27	15%	48%	15%	15%	7%	0%
Large	16	0%	38%	50%	13%	0%	0%
SNA	19	26%	47%	16%	11%	0%	0%
History							
Small	60	13%	60%	17%	2%	3%	5%
Medium	11	18%	27%	27%	18%	0%	9%
Large	1	0%	100%	0%	0%	0%	0%
SNA	84	20%	57%	12%	4%	6%	1%
Science							
Small	10	20%	40%	30%	10%	0%	0%
Medium	9	0%	67%	11%	11%	0%	11%
Large	5	0%	40%	60%	0%	0%	0%
SNA	23	13%	48%	17%	9%	4%	9%
Zoo/Garden							
Small	3	0%	100%	0%	0%	0%	0%
Medium	2	0%	100%	0%	0%	0%	0%
Large	3	0%	33%	0%	33%	33%	0%
SNA	6	17%	67%	0%	17%	0%	0%
Other							
Small	21	29%	38%	24%	0%	10%	0%
Medium	13	23%	38%	31%	8%	0%	0%
Large	4	25%	25%	25%	25%	0%	0%
SNA	38	16%	50%	16%	8%	5%	5%

SNA= Size not available

Is there an established project management practice around digital and innovation?

	Sample Size	We have little to no formalized project management practices or project manager roles.	Project management is unevenly applied to projects.	We have some dedicated project managers for digital projects.	We have multiple project managers focused on digital around the organization.	We have shared project management practices, including project roadmaps, that link multiple projects and groups.	None of the above / I don't know.
Overall	422	29%	40%	17%	6%	3%	6%
Size							
Small	161	24%	43%	18%	6%	3%	7%
Medium	62	31%	39%	11%	8%	5%	5%
Large	29	31%	38%	24%	0%	0%	7%
SNA	170	32%	37%	18%	5%	2%	5%
Type							
Art	129	24%	41%	19%	6%	3%	6%
History	156	35%	40%	16%	4%	1%	3%
Science	47	15%	37%	15%	13%	4%	15%
Zoo/Garden	14	36%	50%	7%	7%	0%	0%
Other	76	30%	37%	20%	3%	4%	7%

Detailed Size and Type

	Sample Size	We have little to no formalized project management practices or project manager roles.	Project management is unevenly applied to projects.	We have some dedicated project managers for digital projects.	We have multiple project managers focused on digital around the organization.	We have shared project management practices, including project roadmaps, that link multiple projects and groups.	None of the above / I don't know.
Art							
Small	67	22%	31%	25%	9%	4%	7%
Medium	27	19%	54%	8%	8%	4%	8%
Large	16	27%	47%	27%	0%	0%	0%
SNA	19	33%	52%	10%	0%	0%	5%
History							
Small	60	26%	55%	11%	5%	0%	3%
Medium	11	42%	17%	25%	8%	8%	0%
Large	1	0%	0%	100%	0%	0%	0%
SNA	84	42%	32%	18%	4%	1%	4%
Science							
Small	10	10%	30%	10%	10%	0%	40%
Medium	9	22%	44%	11%	11%	0%	11%
Large	5	20%	40%	20%	0%	0%	20%
SNA	23	14%	36%	18%	18%	9%	5%
Zoo/Garden							
Small	3	0%	100%	0%	0%	0%	0%
Medium	2	100%	0%	0%	0%	0%	0%
Large	3	50%	50%	0%	0%	0%	0%
SNA	6	17%	50%	17%	17%	0%	0%
Other							
Small	21	30%	43%	17%	0%	9%	0%
Medium	13	42%	33%	8%	8%	8%	0%
Large	4	50%	0%	25%	0%	0%	25%
SNA	38	24%	38%	24%	3%	0%	11%

SNA= Size not available

Does your museum measure its digital work against goals and outcomes?

	Sample Size	We do not have defined goals or KPIs (Key Performance Indicators) and/or we do not measure the outcomes.	We have some defined goals or KPIs and measure outcomes on an ad hoc basis.	We define goals at the outset of a project and gather data at key moments to measure the results.	We continuously track against our goals and KPIs with real-time integrated data.	I don't know / I'm not sure.
Overall	422	41%	37%	11%	3%	8%
Size						
Small	161	45%	35%	9%	4%	7%
Medium	62	35%	47%	6%	0%	11%
Large	29	14%	45%	21%	7%	14%
SNA	170	44%	35%	12%	2%	7%
Type						
Art	129	40%	36%	13%	3%	9%
History	156	46%	35%	8%	3%	8%
Science	47	32%	40%	15%	2%	11%
Zoo/Garden	14	36%	50%	7%	0%	7%
Other	76	41%	41%	9%	3%	7%

Detailed Size and Type

	Sample Size	We do not have defined goals or KPIs (Key Performance Indicators) and/or we do not measure the outcomes.	We have some defined goals or KPIs and measure outcomes on an ad hoc basis.	We define goals at the outset of a project and gather data at key moments to measure the results.	We continuously track against our goals and KPIs with real-time integrated data.	I don't know / I'm not sure.
Art						
Small	67	45%	28%	13%	4%	9%
Medium	27	33%	56%	4%	0%	7%
Large	16	6%	44%	31%	6%	13%
SNA	19	58%	26%	11%	0%	5%
History						
Small	60	47%	37%	5%	5%	7%
Medium	11	36%	27%	9%	0%	27%
Large	1	0%	100%	0%	0%	0%
SNA	84	48%	33%	11%	2%	6%
Science						
Small	10	40%	50%	0%	0%	10%
Medium	9	33%	33%	22%	0%	11%
Large	5	20%	60%	0%	0%	20%
SNA	23	30%	35%	22%	4%	9%
Zoo/Garden						
Small	3	33%	67%	0%	0%	0%
Medium	2	0%	100%	0%	0%	0%
Large	3	0%	33%	33%	0%	33%
SNA	6	67%	33%	0%	0%	0%
Other						
Small	21	48%	38%	14%	0%	0%
Medium	13	46%	46%	0%	0%	8%
Large	4	50%	25%	0%	25%	0%
SNA	38	34%	42%	11%	3%	11%

SNA= Size not available

Does your museum have standardized workflows and practices in place for digital work?

	Sample Size	There are few or no standardized practices applied to our digital work.	We have ad hoc design and development practices but no shared approach.	There are some common practices, including agile experiments and some user-centered design.	Common practices, such as user-centered design and agile practices, are adopted by the digital team.	Practices are embedded across the organization, extending beyond digital.	I don't know / I'm not sure.
Overall	422	34%	39%	15%	3%	2%	7%
Size							
Small	161	37%	39%	14%	2%	2%	6%
Medium	62	24%	52%	8%	5%	0%	11%
Large	29	10%	31%	34%	7%	3%	14%
SNA	170	39%	36%	15%	1%	3%	5%
Type							
Art	129	33%	35%	19%	5%	2%	6%
History	156	39%	37%	12%	1%	3%	8%
Science	47	21%	49%	15%	4%	2%	9%
Zoo/Garden	14	14%	57%	14%	7%	0%	7%
Other	76	37%	41%	16%	0%	1%	5%
Detailed Size and Type							
Art							
Small	67	34%	37%	13%	4%	1%	9%
Medium	27	37%	44%	7%	7%	0%	4%
Large	16	13%	19%	50%	6%	6%	6%
SNA	19	42%	26%	26%	0%	5%	0%
History							
Small	60	40%	35%	15%	2%	3%	5%
Medium	11	18%	36%	9%	0%	0%	36%
Large	1	0%	0%	100%	0%	0%	0%
SNA	84	42%	38%	10%	1%	2%	7%
Science							
Small	10	30%	40%	20%	0%	0%	10%
Medium	9	0%	78%	0%	11%	0%	11%
Large	5	0%	80%	0%	0%	0%	20%
SNA	23	30%	35%	22%	4%	4%	4%
Zoo/Garden							
Small	3	33%	33%	33%	0%	0%	0%
Medium	2	0%	50%	50%	0%	0%	0%
Large	3	0%	33%	0%	33%	0%	33%
SNA	6	17%	83%	0%	0%	0%	0%
Other							
Small	21	38%	52%	10%	0%	0%	0%
Medium	13	23%	62%	8%	0%	0%	8%
Large	4	25%	25%	25%	0%	0%	25%
SNA	38	42%	29%	21%	0%	3%	5%

SNA= Size not available

Has your institution established partnerships with universities, technology companies, local experts, other museums to develop software and technology?

	Sample Size	No.	A few partnerships on specific, one-off digital projects.	Established partnerships with one or more partner organizations.	Enduring partnerships with multiple organizations that support both strategic and operational objectives.	I don't know/ I'm not sure.
Overall	406	34%	45%	16%	3%	3%
Size						
Small	156	36%	47%	14%	1%	2%
Medium	62	26%	44%	18%	6%	6%
Large	28	14%	61%	18%	4%	4%
SNA	160	38%	41%	16%	3%	2%
Type						
Art	122	30%	48%	18%	2%	3%
History	152	38%	41%	14%	3%	3%
Science	45	22%	60%	9%	7%	2%
Zoo/Garden	14	29%	36%	21%	14%	0%
Other	73	40%	40%	18%	1%	1%
Detailed Size and Type						
Art						
Small	63	29%	52%	16%	0%	3%
Medium	27	33%	37%	22%	4%	4%
Large	15	0%	67%	27%	0%	7%
SNA	17	53%	29%	12%	6%	0%
History						
Small	59	42%	41%	14%	2%	2%
Medium	11	18%	45%	9%	9%	18%
Large	1	0%	100%	0%	0%	0%
SNA	81	38%	41%	16%	2%	2%
Science						
Small	10	40%	50%	10%	0%	0%
Medium	9	11%	56%	11%	11%	11%
Large	5	0%	100%	0%	0%	0%
SNA	21	24%	57%	10%	10%	0%
Zoo/Garden						
Small	3	33%	67%	0%	0%	0%
Medium	2	0%	0%	50%	50%	0%
Large	3	67%	0%	0%	33%	0%
SNA	6	17%	50%	33%	0%	0%
Other						
Small	21	38%	43%	14%	5%	0%
Medium	13	31%	54%	15%	0%	0%
Large	4	50%	25%	25%	0%	0%
SNA	35	43%	34%	20%	0%	3%

SNA= Size not available

Does your museum utilize innovation processes such as human-centered design, co-creation, prototyping, iteration, and user testing?

	Sample Size	No.	We are aware of these tools but rarely use them.	We have experimented with innovation processes in our process.	We regularly use innovation processes as part of our regular work flows.	We are leaders in innovation processes and our approaches are regularly adopted by others in our field.	I don't know / I'm not sure.
Overall	406	35%	21%	23%	11%	1%	8%
Size							
Small	156	40%	20%	23%	8%	1%	8%
Medium	62	26%	23%	24%	15%	0%	13%
Large	28	11%	14%	50%	14%	4%	7%
SNA	160	39%	22%	19%	12%	1%	8%
Type							
Art	122	35%	20%	27%	10%	1%	7%
History	152	44%	18%	20%	8%	1%	9%
Science	45	16%	24%	33%	13%	2%	11%
Zoo/Garden	14	14%	36%	7%	21%	7%	14%
Other	73	34%	23%	21%	16%	0%	5%

Detailed Size and Type

	Sample Size	No.	We are aware of these tools but rarely use them.	We have experimented with innovation processes in our process.	We regularly use innovation processes as part of our regular work flows.	We are leaders in innovation processes and our approaches are regularly adopted by others in our field.	I don't know / I'm not sure.
Art							
Small	63	41%	24%	19%	10%	2%	5%
Medium	27	26%	22%	30%	4%	0%	19%
Large	15	7%	7%	60%	20%	0%	7%
SNA	17	53%	12%	24%	12%	0%	0%
History							
Small	59	44%	12%	25%	7%	2%	10%
Medium	11	27%	18%	18%	18%	0%	18%
Large	1	0%	0%	100%	0%	0%	0%
SNA	81	47%	22%	16%	7%	0%	7%
Science							
Small	10	20%	20%	40%	10%	0%	10%
Medium	9	11%	33%	33%	11%	0%	11%
Large	5	0%	40%	40%	0%	0%	20%
SNA	21	19%	19%	29%	19%	5%	10%
Zoo/Garden							
Small	3	0%	67%	0%	33%	0%	0%
Medium	2	0%	0%	0%	100%	0%	0%
Large	3	0%	33%	33%	0%	33%	0%
SNA	6	33%	33%	0%	0%	0%	33%
Other							
Small	21	38%	24%	24%	5%	0%	10%
Medium	13	38%	23%	15%	23%	0%	0%
Large	4	50%	0%	25%	25%	0%	0%
SNA	35	29%	26%	20%	20%	0%	6%

SNA= Size not available

What types of audience research does your museum do?

	Sample Size	Anecdotal Data	Basic Feedback	Community-based Evaluation	Iterative Evaluation	Strategic Evaluation	Impact Evaluation	Other
Overall	348	16%	54%	18%	9%	18%	13%	4%
Size								
Small	139	16%	61%	21%	8%	18%	12%	2%
Medium	45	16%	55%	16%	13%	24%	24%	1%
Large	13	3%	23%	7%	10%	17%	10%	3%
SNA	151	17%	53%	18%	7%	15%	9%	6%
Type								
Art	95	14%	54%	17%	4%	15%	12%	2%
History	142	26%	55%	19%	9%	16%	9%	4%
Science	32	9%	50%	12%	12%	27%	15%	4%
Zoo/Garden	12	4%	73%	13%	13%	33%	33%	0%
Other	67	1%	52%	23%	13%	16%	13%	3%

Detailed Size and Type

	Sample Size	Anecdotal Data	Basic Feedback	Community-based Evaluation	Iterative Evaluation	Strategic Evaluation	Impact Evaluation	Other
Art								
Small	53	8%	58%	21%	3%	11%	10%	1%
Medium	20	4%	59%	17%	7%	21%	24%	3%
Large	7	1%	13%	6%	0%	19%	0%	6%
SNA	15	1%	64%	14%	5%	18%	14%	0%
History								
Small	57	9%	62%	22%	10%	22%	14%	3%
Medium	7	1%	46%	8%	8%	15%	15%	0%
Large	1	0%	100%	0%	100%	0%	0%	0%
SNA	77	15%	51%	19%	7%	11%	5%	6%
Science								
Small	19	2%	63%	25%	13%	17%	17%	0%
Medium	12	2%	69%	31%	38%	31%	31%	0%
Large	2	0%	50%	25%	0%	0%	0%	0%
SNA	34	4%	42%	20%	7%	13%	7%	7%
Zoo/Garden								
Small	8	1%	64%	9%	18%	45%	9%	0%
Medium	4	1%	69%	0%	0%	20%	10%	0%
Large	1	0%	50%	0%	20%	0%	20%	0%
SNA	19	1%	42%	19%	12%	27%	19%	8%
Other								
Small	2	0%	67%	33%	0%	0%	0%	0%
Medium	2	0%	100%	50%	50%	100%	100%	0%
Large	2	0%	25%	0%	25%	50%	50%	0%
SNA	6	1%	100%	0%	0%	17%	17%	0%

SNA= Size not available