Science Museums Future, Working Group Four - Museum Fundraising
Digital First: A Unified Vision for the Future
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Digital First: Science museums create tangible results in diversity, equity, accessibility, and inclusion in the sciences.

"When asked, 31% of museums admitted they had no digital strategy . . ." [i]

"We are in a community each time we find a place where we belong."[ii]

Keywords: Future of Science Museums, Science Museum Funding, Digital STEM / STEAM, Digital Science Museums, Science Museum Digital Memberships

Digital-first is a strategic plan that will increase science literacy; promote diversity, equity, accessibility, and inclusion in the sciences; and increase science museum funding.

The COVID-19 pandemic has exposed the deficiencies of science museums. Though there are approximately 350 science museums in the US,[iii] there is no clear, comprehensive vision of how the museums serve the public. There is also a lack of sufficient reliable funding and a failure to present why policymakers and donors should contribute to their science museum funding.

Museums are the most trusted source for information[iv] , and more than 850 million people visit museums in the United States every year, more than all sporting events combined[v]. Those two statics, the trust and the breadth of reach, uniquely position museums for funding and content creation.

Of the approximately 35,000 museums[vi] in the United States, about 350[vii] of the museums are science museums. Digital First will be an initiative to expand the impact and collaboration of science museums. Working with the National Science Foundation[viii], Association of Science-Technology Centers (ASTC)[ix], the American Alliance of Museums (AAM)[x], the American Association for State and Local History (AASLH)[xi], Make[xii], American Academy of Arts and Sciences[xiii] , and Next Generation Science Standards (NGSS)[xiv], this collaboration will dramatically increase the online STEM, STEAM and online science curriculum in the United States and create a clear and consistent funding message and system for state, federal and private funding.

Ninety-five percent of learning happens outside the classroom.[xv] The shift to a digital-first strategy for science museums will move science education beyond the classroom, creating lifelong experiences. It will also give underserved members of the national (and global) community access to science-related content. The science centers rethink the concept of "community" to mean any place where people feel they belong, including but not limited to the physical location.

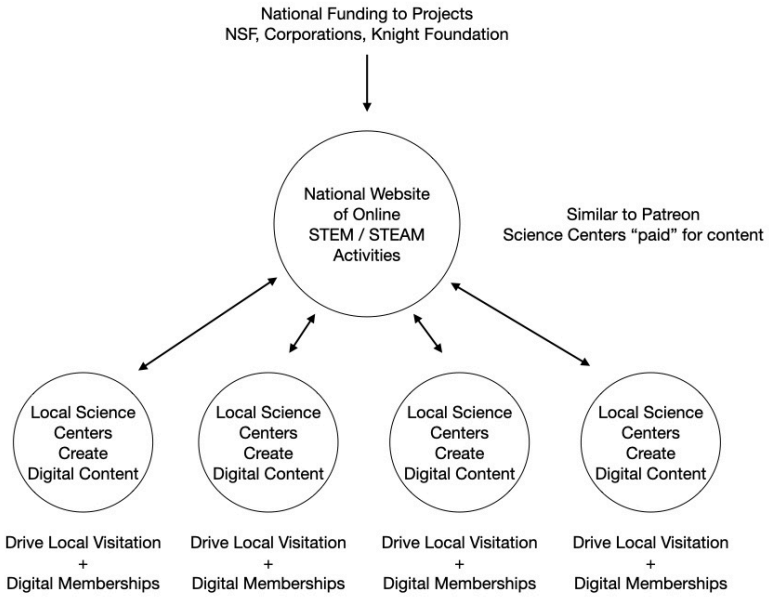
How Will Digital First Change Science Museums?

1. **Clear and Concise Funding Message;** for policymakers, corporate funders, and individual funders; Digital First: Science museums create tangible results in diversity, equity, accessibility, and inclusion in the sciences.

2. **Centralized funding**; a structure for policymakers, corporate funders, and individual funders; a website interface directly funds online STEM and STEAM content creation and local science centers.
3. **In-Person visitation**; Digital First prioritizes the in-person experience as a step in a museum visitation cycle, 1) online (Digital First), 2) In-person and a drive to 3) Repeat In-Person visitation.
4. **(Digital) Visitor Centered** through a combination of Known Performance Indicators (KPIs), Net Promotor Scores (NPS), and Next Generation Science Standards (NGSS) and curriculum metrics, the content to be enjoyable and digital visitor-centered. The content user-driven, similar to a Netflix business model versus a cable television business model.
5. **Digital Communities**; a rethink of "science museum community" to include online digital communities (audiences) and local in-person communities, driving in-person visitation.
6. **National and Local First**; combine the strengths of national science standards and the strengths of local science centers. Through IP addresses drive digital visitors to local science museums and area museums.
7. **Multimodal**; by utilizing the 35,000 museums in the United States, creates a multidisciplinary approach to science, including engineering, the arts, design, and applied sciences.
8. **Drive content creation**; similar to Netflix, digital-scicnce.org website drives science content creation by all 35,000 museum staff and volunteers. Science content creators are "paid" for their science content through the online rating system.
9. **Create business / museum partnerships**, similar to the New Museum[xvi] think tank drive innovative private-public collaborative projects.
10. **Free / Paid Membership Model**; large segments of the http://digital-science.org/ website will be free and drive local in-person visitation, and other sections
11. **Merge Informal and Formal Education**; symbiotic relationships between schools and science museums.
12. **Informational and Experiential**; instead of a typical science museum website that is informational, digital content to be experiential.

Digital First Five-Year Strategic Plan

1. Adopt a digital-first strategy for Science Museums of the United States.
2. Create a unified advertising campaign for the approximately 350 science museums in the United States.
3. Develop a countrywide funding model with online science programming.
4. Develop a national website for science museum digital memberships.
5. Monitor the success through Known Performance Indicators (KPIs) and metrics.



The Digital First science museum initiative will create increased science museum funding, increased tangible results in science education, and increased visibility and importance to science education.

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[i] https://knightfoundation.org/wp-content/uploads/2020/10/Digital-Readiness-and-Innovation-in-Museums-Report.pdf

[ii] https://artmuseumteaching.com/2018/10/01/towards-a-more-community-centered-museum-part-3-defining-valuing-community/

[iii] Around one percent of the 35,000 museums in the United States. https://web.archive.org/web/20190517135241if_/https://www.imls.gov/assets/1/AssetManager/MUDF_TypeDist_2014q3.pdf

[iv] https://www.colleendilen.com/2019/03/06/in-museums-we-trust-heres-how-much-data-update/

[v] https://www.aam-us.org/wp-content/uploads/2020/02/2020-Leave-Behind-Packet-PDF.pdf

[vi] https://www.imls.gov/news/government-doubles-official-estimate-there-are-35000-active-museums-us

[vii] 1.1 % of 35,000 https://www.museumplanner.org/types-of-museums-2/

[viii] https://www.nsf.gov/

[ix] https://www.astc.org/

[x] https://www.aam-us.org/

[xi] https://aaslh.org/

[xii] https://makerfaire.com/

[xiii] https://www.amacad.org/

[xiv] https://www.nextgenscience.org/

[xv] https://www.researchgate.net/publication/299233891

[xvi] https://235bowery.s3.amazonaws.com/pressreleases/205/NEW%20INC_2019-20%20class_press%20release_11.22.19.pdf