



# Catching Our Breath: Assessing Digital Technologies for Meaningful Visitor Engagement

by Stacey Mann, Jennifer Moses, and Matthew Fisher

Fathers' Day at the Met could have been meltdown city for my friends' three-and six-year-old daughters if not for "Aunt" Stacey and her iPhone. As the girls' attention began to wane, we began to play SFMOMA's Family Gallery Game app, helping us to connect with the surrounding paintings and each other in new ways:

*"Look at the clothes of the tallest person on your team. What colors, shapes, and lines do you see? Choose an artwork in the gallery that most closely matches their clothes. Explain your choice."*

The three-year-old selected Gauguin's *Two Women* because one of the women's shirts matched my sweater. The six-year old pointed to *Bouquet of Flowers in a Vase* by van Gogh because the dark blue and black background matched my entire outfit (including sneakers). Prompted by the app, we side-stepped, single-filed, and penguin-waddled through seven galleries, and along the way found paintings that best-captured a sense of "Cool. Quiet." and "Bright. Fun." We studied one painting closely and then recalled its details and pantomimed paintings as the others guessed. When I said my good-byes hours later, the elder child thanked me for playing "that fun game" today at the museum. Her parents promptly downloaded the app!

## The Digital Landscape

There is no doubt that rapid technological change is transforming the world around us and in turn the museum industry. The question is no longer when, but rather *how* will we embrace emerging digital technologies. Museum professionals—exhibition developers and

educators in particular—are striving to define the space between engagement and distraction, where we can leverage technology to expand and enhance the visitor experience without overwhelming (or underwhelming) them with new digital tools. With the rush to digitize, we advocate pausing to take a breath. How can we leverage mobile and other technologies strategically to support meaningful interactions in museum spaces? What are the pros and cons of the many tools, features, and functionalities already in use?

Technology revolutions have over time transformed the way we live and interact. Today, we witness the rise of the Internet and mobile technologies with the capacity to deliver the world to the palm of your hand. As with earlier milestones, the genie isn't going back in the bottle. However, decades may pass before we fully understand the implications of any new technology, either at the individual or societal level. By that time, the marketplace has been defined less by best practices, and more by ingrained habits and profitability. It can be difficult to rethink and retrain ourselves to use the technology in more strategic or beneficial ways.

Technology (mobile or otherwise) is ubiquitous in our daily lives, with current surveys indicating that mobile platforms are emerging as the primary access point for people to engage with the world around them<sup>1</sup> (Brenner, 2013). Yet, current research about how we use technology in our daily lives paints a sobering picture. Several studies indicate shifts in cognitive processing, shrinking attention spans, delayed or deferred

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*The SF MOMA Family Gallery Game app encourages visitors to explore art galleries together, interacting with the artworks and one another along the way. Furthermore the educational focus on fundamental art interpretation skills means the app can be used successfully in nearly any art museum. Courtesy of Night Kitchen Interactive.*

social skill development, and drops in fundamental literacy skills (Bauerlein, 2008; Carr, 2011; Turkle, 2011; Small and Vorgan, 2008). “Digital natives” (aka Millennials), in particular the youngest among them, don’t necessarily distinguish between the real and the *virtual*. When they do, many of them prefer the digital realm.

As much as it may be eroding attention spans and traditional forms of communication, digital engagement may also be fostering a new set of intellectual and social skills that often mystify non-digital natives. They include a greater flexibility to make quick, lateral connections; an increased consciousness of oneself within a larger social context; more familiarity with local, national and global perspectives; and a stronger feeling of empowerment to openly voice their ideas. We believe there is balance to be found in this digital landscape by anchoring museum technologies in traditional interpretive methods, while capitalizing on new digital abilities.

### **Focusing Our Efforts**

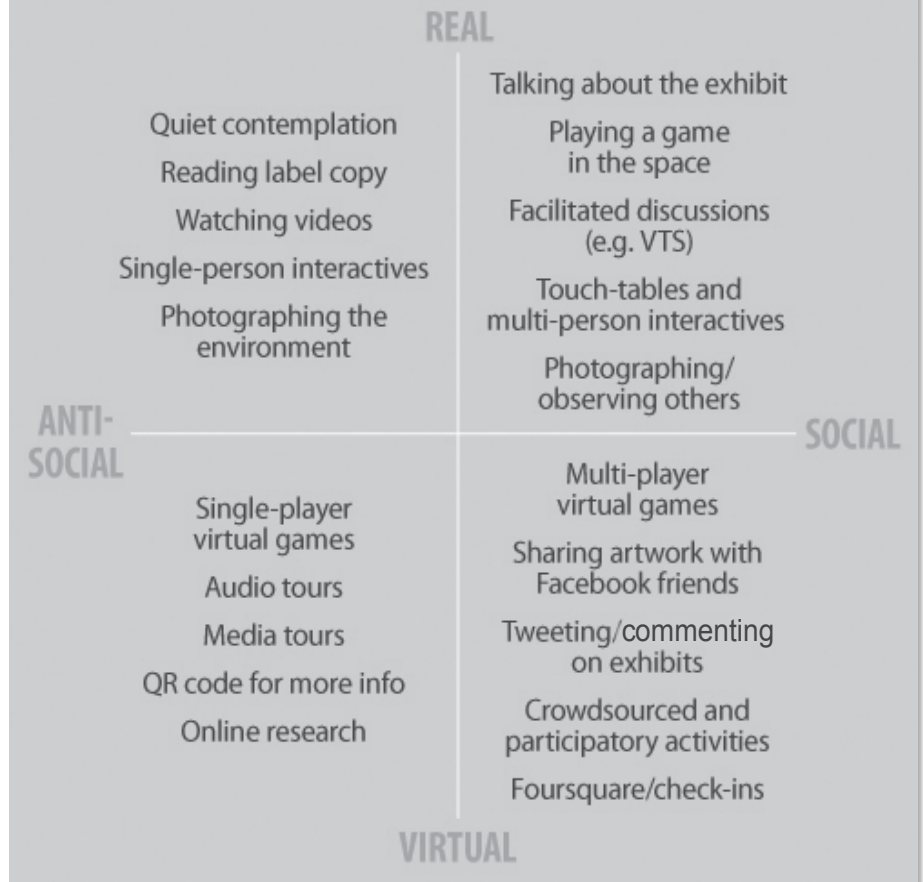
Traditionally museums have served the

public by providing access to historical, scientific, and cultural artifacts and informed commentary and research, and are increasingly adopting technologies to support more engaged learning. But the museum-going experience must be about more than knowledge transfer.

The 21<sup>st</sup> century museum is visitor-centric, participatory, and social. What role should technology play? On one end of the spectrum, purists resist both the technical and democratizing aspects of new media; on the other end, “techno-evangelists” advocate doggedly for the opportunities presented by new media, often loathe to hear any reservations or criticisms of mobile technologies. We believe that new media technologies present enormous opportunities to innovate and enhance museum exhibits; but uses of these technologies must be grounded in a mindful approach that may urge visitors to actually look up from their mobile devices, to return their attention to the actual space of the museum exhibit, and to the other people sharing that space.

So what do we mean by a mindful approach? Based on our collective

# MUSEUM SOCIAL BEHAVIOR CONTINUUM



The activities in the upper right, those that are both social and in real space, take greatest advantage of the museum environment. This quadrant is what we like to think of as the “sweet spot” of social learning, or “real social.” Courtesy of Night Kitchen Interactive.

experiences in the industry, we have identified some basic guidelines for harnessing digital technologies to foster social interaction and transformational learning in the museum space.

### Don't Buy the Hype

First, technology is not always the solution.<sup>2</sup> More importantly, just because we can create and engage with virtual worlds doesn't mean the physical world melts away. Every museum professional has observed the zombie-like effect that headphone audio tours induce in gallery visitors: “inattention blindness” as described in a recent American Automobile Association study looking at the effects of hands free technologies on drivers' awareness of the physical space around them (AAA, 2013). In the attempt to deliver more interpretive content to visitors via digital means, we don't want to lose sight of museums as a communal space offering shared experiences.

### Embrace Real Social Space

Technology is not, nor should it be, considered a replacement for the “real social” spaces represented by museums. That said, engaging in virtual connections is not definitively anti-social; one can be both social and virtual (think Facebook). By “real social” we mean the person-to-person connections made within real spaces such as museums (Fisher and Moses, 2013). No matter how beautiful and engaging your museum's mobile apps or other in-gallery technologies, there is still profound value in social engagement and dialog within the museum space. To stem the tide of technological alienation, some museums

have begun to enforce phone-free zones. We would argue that this is not the only answer. Instead we challenge museums to find creative ways to harness what would otherwise be a distraction from the immediate environment.

### Make it Integrated

Technologies are most effective at creating an intensely engaging experience when the context of the physical space supports the underlying objectives of the technological experience, and vice versa. In order to encourage social behavior, carve out room for engagement and model or scaffold the behavior you hope to inspire. Additionally, don't work against visitor expectations for the environment. At the University of Michigan Museum of Art, their DialogTable (a multi-person, gesture-based interactive) is located in a

### Endnotes:

1. As of May 2013: 91% of American adults have a cell phone, 56% of American adults have a smartphone, 34% of American adults own a tablet computer.
2. Evgeny Morozov cautions against “solutionism,” arguing that the potential uses of digital technologies have been over-hyped, and their possible consequences under-examined.



The DialogTable uses gesture-based technology to allow visitors to learn collectively and share their reflections about artworks in the University of Michigan's Museum of Art. Courtesy of Night Kitchen Interactive.

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#### References:

AAA Foundation for Traffic Safety (2013). *Cognitive distraction: Something to think about*. Retrieved June 19, 2013 from [http://newsroom.aaa.com/wp-content/uploads/2013/06/Cognitive-Distraction\\_AAAFTS-Research-Compendium.pdf](http://newsroom.aaa.com/wp-content/uploads/2013/06/Cognitive-Distraction_AAAFTS-Research-Compendium.pdf)

Bauerlein, M. (2008). *The dumbest generation: How the digital age stupefies young Americans and jeopardizes our future (or don't trust anyone under 30)*. New York: Penguin Group.

Brenner, J. (2013). *Pew internet mobile*. Retrieved June 19, 2013 from <http://pewinternet.org/Commentary/2012/February/Pew-Internet-Mobile.aspx>

gallery adjacent to their café rather than deeper within the more contemplative galleries. Conceived to engage visitors in conversations about objects from the collection, the table offers a variety of voices from the museum's community, such as professors, performers, poets and visitors. The exhibit's locale supports the objectives of the DialogTable by allowing for real conversation about objects from the collection as visitors digitally explore information about pieces they viewed in the galleries. Connecting lines are drawn between visitors' common object selections, revealing common bonds between strangers, and creating a natural springboard for further discussion, all within an inviting atmosphere. The experience extends beyond the museum as well with visitors creating pools of favorite objects to be retrieved on the website, where they can learn more and contribute to the tags that dynamically generate connections on the table.

#### **Make It Personal**

When visitors walk through the front

door of the museum, they want to be inspired or tantalized by the collection, the space, and the experience. There's a lot competing for their attention. Timely and contextual information is useful, but the further goal should be to establish affinity with visitors, and invite personal connections to initiate deeper engagement. Personalization can be accomplished via simple polls (*What brought you to the museum today?*) or more advanced preference mapping (*Create your own tour!*) The deeper question is: once you've made a connection, how will you capitalize on the openness of that moment?

As part of their recent exhibition *State of Deception: The Power of Nazi Propaganda*, the United States Holocaust Memorial Museum created an interactive texting tour. By dialing a phone number printed near the entrance, visitors are introduced to Museum volunteer and Holocaust survivor, Margit Meissner. As visitors listen to her share her personal story of survival and how propaganda

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had a direct effect on the lives of her and her family, “Margit” texts further instructions on how to proceed. At subsequent stops, visitors are prompted to study certain objects and respond to questions posed by our intrepid avatar. Having a name, face, voice, and story associated with the auto-generated SMS texts adds a dimension of intimacy to the experience. The visitor is asked to engage with this content by someone who has a deeply personal stake in the material. The experience allows audiences to personally connect, however tangentially, to someone they wouldn’t normally be able to meet.

### **Make It Social**

We’ve already expressed our belief in the importance of social interaction as a key factor in successful technology integration. In a recent review of museum mobile offerings we found that most (like audio tours) don’t encourage social engagement (Fisher and Moses, 2013). There are significant exceptions, however. In the opening anecdote we described SFMOMA’s Family Gallery Game, an intentionally social romp through an art museum, a space typically associated with quiet and reflective behavior. The app reinforces respectful gallery etiquette but in a way that also encourages group collaboration, discussion, and play.

We acknowledge that “social” can mean different things, take many forms, and be tricky to achieve. What can we learn about creating social spaces from technology that’s already out there in the world? To support social behavior, an exhibit or mobile app needs to do a number of things:

- establish affinity with visitors;
- ask visitors questions that engage their personal impressions, thoughts, and feelings;
- prompt exchange and sharing with others;
- foster awareness of an individual’s relationship with a larger group or community; and
- encourage trying new activities or consider different perspectives, for fun and for learning.

By empowering visitors to foster their own opinions and encouraging them to enjoy the museum space in playful and imaginative ways, technology can help us transcend barriers to participation.

### **Conclusion**

We know that as digital technology continues to transform our world, it will have alarmist detractors and dedicated adherents, and both camps will have valid arguments. Museums are uniquely positioned to be shelters in the storms of change where visitors can connect to the real, physical world even while taking advantage of the latest advances in virtual experiences. This new age of digital media and mobile devices offers enormous opportunities for museums to expand their missions and methods. But, we suggest deliberation, moderation, and consideration. We urge exhibit designers and educators to expand the types of experiences they offer with the following caveat—let the technology flow from the experience you hope to create. ✨

### **References Continued:**

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### **Additional Resource:**

Find more information about the DialogTable at <http://www.umma.museum/view/DialogTable/>