Visiting the museum? There's an app for that.

+ Add to list

By Jason Edward Kaufman September 30, 2011

Imagine the museum of the future. You step inside your home tele-dec and settle into an armchair that self-adjusts to your comfort settings. "Computer," you command, "load the National Gallery of Art." The room brightens and you find yourself in the atrium of the great Washington institution.

Let the virtual visit begin.

We're not there yet, but technological leaps are rapidly making possible remote access not only to images and texts about collections, but also to audio and video guides and even to conversations with museum professionals and fellow museum lovers through social media.

The consensus among experts is that the field is still in the R&D phase, testing strategies and new technologies to learn which approaches will best serve museums' missions. But all agree that museums inexorably are moving into the brave new virtual world.

Here's one example. The Smithsonian Institution's National Museum of African American History and Culture won't open until 2015, but the museum is working on an application that will let people look through their phone cameras at the future site on the Mall and see a ghostly image of the building as it will one day appear.

"We're thinking of making imaginary exhibitions with images of works in the collection," says Nancy Proctor, the Smithsonian's head of mobile strategy and initiatives. "It will probably take us a year to pull this off, but I think it's going to be very, very cool."

The National Postal Museum may issue an app that enables users to point a smartphone at the new stamp commemorating Owney, the 19th-century mail train dog, and see a 3-D version come to life barking and dancing.

Only a few museums have the resources to develop bells and whistles, let alone cutting-edge "augmented reality." The vast majority have Web sites offering only basic visitor information, exhibition synopses with a few images and perhaps collection highlights.

"The world of art has been relatively slow at embracing all things digital. I think it's going to be an explosion in the next two years," says Marc Sands, director of audiences and media at the Tate in London, which has one of the world's most robust digital programs.

The Tate is launching a redesign of its Web site in November, introducing a new content management system that integrates social media so users can send out content immediately on Tumblr, Flickr, Facebook, Twitter and other vehicles. Newspapers already do this, but it's a big step for museums, Sand notes.

Yet, the road map to the digital future remains a work in progress.

"Museums are no more certain than other industries about the potentials and what the outcomes will be," says Maxwell Anderson, director of the Indianapolis Museum of Art, an innovator in the field. "I see it as an experiment."

Progress is hampered by the diversity of often mutually incompatible user devices, software platforms and interfaces. Museums are often thick-walled buildings with imperfect broadband and Internet access. And there are chronic shortages of time, money and staff. Moreover, living artists often restrict online reproduction of their works for fear of unauthorized and commercial replication. And no one knows what visitors need and want in terms of digital enhancements to the museum experience.

There is general agreement that the fundamental task for museums is to expand and enhance digital presentations of their collections. "Most of what museums have learned about collections is still in file drawers," says Anderson, who notes that audience demand "is coercing curators, registrars and archivists to get that information out of the file cabinets. It's making museums do the work they should have done for the last 100 years."

And as museums add digitized images, texts, audio and video to their online databases, they also are connecting with audiences through social media and exploring mobile applications accessible on smartphones. In other words, there is a lot of chatter about chatter.

"We seem to be shifting from the museum being the source of information to wanting to have input about visitors' thoughts and observations," says Elizabeth Merritt of the American Association of Museums' Center for the Future of Museums.

The proliferation of social media such as Facebook and Twitter promotes personal engagement and live conversations. "I'd like to see projects that use technology to make museums better social places," says Nina Simon, executive director of the Museum of Art & History in Santa Cruz, Calif.

Activity cards at her museum encourage visitors to select a sculpture,

photograph it and send the image as a gift with a message about why they are bestowing it on the recipient. "It's the museum experience as shareable," Simon says.

Along the same lines, for an exhibit of photographic portraits of famous Latinos by Timothy Greenfield-Sanders, the Brooklyn Museum installed kiosks that record videos of visitors explaining what their heritage means to them, then uploads them directly to YouTube. An iPhone app enables them to do this outside the museum as well, says Shelley Bernstein, chief of technology. How such projects will alter the educational character of museums remains to be seen.

The in-gallery experience is likely to be profoundly transformed, though no one knows precisely how. Perhaps many visitors, especially younger ones, would love to be able to stand in front of a painting — say Bellini and Titian's "Feast of the Gods" in the National Gallery — and have the image automatically appear on their smartphone screens with an overlay identifying each of the depicted figures. Perhaps they want to tap on menu items for in-depth information and to hear a curator via their earpods discuss the work and its creators.

This sort of experience is within grasp for museums. Some already come close, and for others it seems less a question of "if" so much as "when."

The Smithsonian surveyed visitors to the Mall in summer 2010 and found that about 30 percent had phones that could run apps. And, according to the Pew Research Center, by 2015 more people will access the Internet via mobile devices than via computers. The American Association of Museums calculated in December that only 5 percent of museums had smartphone apps, but one out of three planned to introduce some mobile technology this year.

A signal event in the transition to digital culture came last week when the Metropolitan Museum of Art lifted its ban on cellphone use in galleries. "We don't want people talking on the phone — but to use their phones to access collection information," says Carrie Rebora Barratt, associate director for collections and administration. The Met's first iPhone app accompanied the recent exhibition "Guitar Heroes" and allowed users to listen and watch Bucky Pizzarelli play some of the instruments on view.

The Met's primary effort has gone into its Web site, which attracts 45 million visits a year, compared with 5 million physical visits to the museum, Barratt says. Even if most Web surfers merely look up hours or restaurant menus, millions more seek intellectual content online.

The digital media department, which has grown to 42 persons since it was established two years ago, last week launched a redesigned Web site that delivers content from all 17 departments' databases spanning the entire catalogued collection. Zoomable photographs of all the galleries are accompanied by texts on their contents and on individual works — "so it is possible to tour the museum from your computer or phone," Barratt says.

"Visitors wanted itineraries," she adds, and the new site responds by providing interactive maps and tours that can be printed or viewed on a mobile phone. The museum still hands out acoustiguides, but Barratt says the long-term plan is for visitors "to get voices, images and text on their own devices."

"The shiny new things are the ones that play on smartphones," says

Proctor, though she has yet to see mobile apps that match the quality of

Web sites.

"In truth, I don't think anyone knows what they're doing," says the Tate's Sands. "We're in a period of mass experimentation and trial."

The Metropolitan, the National Gallery of Art and the Tate are hanging back, waiting to see what evolves.

The Museum of Modern Art is more in the vanguard, having developed mobile platforms and incorporated live streaming of events such as the Marina Abramovic performance last year. Allegra Burnette, who has led the museum's nine-person digital media department for 10 years, says the current "Talk to Me" exhibit of human-machine interactive devices employs quick response (QR) codes and Twitter hashtags for each object, enabling visitors to scan the coded images to call up dedicated Web pages and associated Tweets.

"Digital is not a little pocket in the museum. It's everything," she says, noting increasing collaboration with members of the marketing, education and publishing staff. The museum has added mobile ticketing, and next month it will launch a members-only site with exclusive previews of content.

Burnette says MoMA's plan is to make content available for people to use on their own devices and to offer them a device if they don't have one. "We're still trying to understand how people use something more image-and video-based in a gallery and how much that enhances or conflicts with the experience."

There are concerns that visitors will spend time staring at their screens instead of the exhibits. Simon, of the Museum of Art & History, dismisses the issue. "It's charming if a person has a sketchbook in the gallery but not if a person takes a picture with their cellphone? They are the same thing. There are cultural hang-ups people have to get over," she says.

The ideal is to provide on-demand answers to questions visitors may have

and to do so unobtrusively on their own handheld devices. Putting aside battery life and roaming charges for foreign visitors, there are questions of content, connectivity and compatibility that will take years to sort out.

Another issue is how to interconnect museums. Libraries have created networks of shared information, but museums remain largely proprietary, reluctant to sacrifice their copyrighted assets to the commons.

Anderson has been a visionary in this regard. He created a digital consulting firm within the Indianapolis museum. The unit, led by software developer Rob Stein, has developed an open-source platform for creating multimedia tours that has been adopted by the Museum of Fine Arts, Boston; the San Diego Museums in Balboa Park; the Gemeentemuseum in The Hague; and others.

Anderson formed the Art Museum Image Consortium and Art Babble to encourage museums to bring together their images and videos in joint venues. More recently, his Indianapolis Museum of Art has joined nine museums in the Getty Foundation's Online Scholarly Catalogue Initiative to develop information architecture that allows linking artworks and secondary materials, comparative images, audio and video. "Ideally, I've always felt it should be a cosmos of museums in one space sharing data across institutions," Anderson says.

Google Art Project is moving in that direction, gathering onto one site images of artworks from multiple museums. In addition to still images, a robot camera creates user-directed tours of the galleries.

The project, free to museum partners and end users, involves 17 museums, including the Met, MoMA, the Rijksmuseum, Hermitage and the Tate, and expects to draw 10 more in the United States by mid-2012, said Amit Sood, head of the project.

Image-recognition technology called Google Goggles lets visitors point their camera phones at a painting and automatically bring up related information on their screens. The system is in place at the well-wired Getty Museum in Los Angeles, where the application also allows visitors to take a picture of wall labels and have them translated into more than 50 languages.

Sood says the next iteration will improve the virtual navigation, increase content and geographic diversity, and include a feature that allows users to create personal collections from different museums.

The Tate's Sands deems Google's virtual-tour technology "the most interesting development in the last nine months. . . . The idea that you in Washington can wander around the Tate gallery where you are — it's never going to be the same as an actual visit, but it's a pretty amazing experience if they can get it right."

Jason Edward Kaufman is a New York-based critic whose IN VIEW blog is at jasonkaufman.info.

