

Culture Report

Film Sports Dance Art Food Music

Taking museums into the digital age

With screen culture ubiquitous among the younger generations, museums are employing cutting-edge technology to remain relevant in the 21st century **By Judith Sudilovsky**



COURTESY / ISRAEL MUSEUM

IN THE 2009 children's movie sequel "Night at the Museum 2: Battle of the Smithsonian," former night watchman Larry Daley, played by Ben Stiller, returns to the American Museum of Natural History in New York only to discover that many of the exhibits that had been under his care – and which had come to life every evening thanks to the magical Egyptian Golden Tablet of Akhmenrah also on exhibit at the museum – are being packed away and sent to the Smithsonian Institution Archives in Washington, DC, to make room for new, more interactive exhibits.

Stiller is able to rescue the tablet and his friends from a future of lifeless storage, and in the final scenes of the movie at the Grand Opening Gala, all the exhibit characters are very much alive, and the visitors are in awe of what they think is the museum's cutting-edge holograph technology.

While, at least for now, the real museum world lacks the special powers of the Golden Tablet, both the Smithsonian and the British Museum – where the third and final sequel of the trilogy takes place – were quick to capitalize on the movie's popularity among the younger set, luring people onto their Internet websites, while digital tablets have become one of several almost de rigueur digital technologies for museums that want to remain relevant in today's technologically driven world.

Ironically, however, though as "The Start-Up Nation" Israel is considered a leader in creating and developing innovative technology, most museums here have been slow on the uptake when it comes to integrating new technology into their repertoire.

Google's digitalized human-sized robot in front of the Israel Museum's Shrine of the Book which houses the Dead Sea Scrolls. The robot panoramically photographed the museum's entire permanent collection to put it online

A recent conference initiated by the Tower of David Museum and co-sponsored by the Israel Council of Museums (ICOM) hoped to change that by exploring, for the first time in Israel, the notion of museums in the digital age and how to use technology to enhance the visitor experience, bringing together experts from Israel and abroad to begin the discussion with museum directors, educational directors and new media developers from all of Israel's museums.

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"It's a language we need to bring into our world and we realized that in Israel many museum people are unsure of how to start such projects," says Eilat Lieber, director of the Tower of David Museum. "There are innovative things out there, and here we are still working with the old methods. We have a lot to learn and to do."

One museum that has taken the digital world head on is the new Friends of Zion Museum. Located in the center of Jerusalem, tucked away inside two joined renovated historic buildings, the museum

was conceived and founded by Dr. Mike Evans, an American evangelical minister, journalist and author. It uses a plethora of technologies in its architecture, cinematography, exhibit design and interior design to complete its multimedia storytelling experience of the history of Christian Zionist friends of Israel.

"Today, people need a different kind of stimulation. It is not enough to stand in front of a piece and have a sensual experience. You have to give people a reason to leave their phones and go see something," says Aya Feldman, creative director of Disk-In Pro, the experience design agency that created the museum. "Here in the museum, the technology allows us to give an experience on so many levels."

Disk-In Pro deems the museum as "the most significant demonstration of new technologies in exhibition storytelling in Israel to date."

Designing an entirely new museum from the beginning allowed the Disk-In Pro team to incorporate an extensive list of technologies into the structure, including an interactive guest wall with a recording studio where visitors can record and send their messages and impressions to different social media; an interactive donation wall where they can scroll down according to the alphabet to find a name; a time elevator, which with its screens and music, gives an entirely new and unexpected experience to riding an elevator (hint: it is not your grandmother's muzak); an original music score that accompanies the visitor throughout the exhibits; visual experiences using 5.1 surround-sound systems and 4k resolution screens with three projectors on top and five on the bottom; video mapping; a complex animation method called rotoscoping that brings live action footage into a painted animation; a 36-screen synchronized wall; and the ability for museum guides to switch the narration throughout the museum into one



of 13 languages at the switch of a button.

“For us, it was a playground to find what hasn’t been done before and doing research and putting it all together,” says Feldman. “The whole thing is a piece of art. A lot of things have never been done before, certainly not in Israel.”

People who come to visit the museum from abroad usually assume the technology was done by outside workers either from the US or Europe unaware of the multiple layers of talent to be had here in Israel in the world of technology, she says. In fact, all the work was done by Israeli professionals.

To highlight the possibilities of how museums can try to harness the brainpower of the Israeli hi-tech world to their own advantage, The Tower of David conference also included a museum-sponsored “Hackathon.” Close to 100 participants spent 30 hours coming up with innovative solutions of how to incorporate the latest digital technology into the museum’s exhibits.

Fueled by pizza and coffee, the first-place winning group, “Zombie Rat,” had been formed on the spot and included two Jeru-

salem ninth graders, Ofer Stolev from the Hartman High School for Boys and Yuval Goldschmidt from the Himmelfarb High School, Malachi Shnoer, a 12th grader from an army cadet school in the Golan Heights, and Royi Elbag, 36, and Ya’ara Ilan, 39, both from the company ARCH, which deals with applications for archeological sites. Based on the popular “Escape Room” virtual quest game where participants need to follow clues to escape a site, the group created an “Escape the Kishle” game played on the ENTiTi-augmented reality and virtual-reality platform provided by the Israeli company Waking App. Their first place prize included a package from AtoBe Accelerator at the Azrieli College of Engineering in Jerusalem, which will be used to help encourage the actual production of an Escape the Kishle game.

Still, despite winning the competition, in his presentation of the winning game, Goldschmidt admitted that he personally found museums boring.

“Museums have lots of interesting exhibits but they don’t know how to bring people

in,” he told *The Jerusalem Report*. “There is nothing to do but to look at the exhibits. Technology can help.”

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It is this situation that museums in Israel must now tackle if they are to continue to attract the interest of local and international visitors and engage them in exciting ways in a world full of wide-ranging technology and choices, says Lieber. While Israeli museums may have a lot of content to offer, from art to history to archaeology and sci-



COURTESY / TOWER OF DAVID MUSEUM



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ence, patrons these days demand more than just a visual exhibit, she says. They want an “experience.”

“Museums like to see themselves as cultural institutions, but we also exist within societies. So in addition to the exhibits, we are looking for ways to maximize our value. Though going digital is not the only way to do this, it is a necessity because we live in a world where the screen culture is an indivisible part of our lives,” says Dorit Valentz, chairwoman of the Association of Museums and International Council of Museums Israel. “Everybody uses smart phones and computers and, if it is happening with me at my age, then all the more so with my children and grandchildren.”

One of the forerunners in the use of digitalized technology in Israeli museums is Dr. Susan Hazan, curator of new media and head of the Internet office of the Israel Museum, which already in 1997 launched the museum’s first full-fledged website as one of Israel’s first museums to go online. It is now in the process of creating its fifth comprehensive website.

It took Hazan just a few years to realize how potent online media could be in the museum world, she says, and she went to the UK for graduate and doctorate studies in the field. The question that most intrigued her, she says, was how to digitally disseminate the collection without losing its integrity.

“The museum is first and foremost about the collection. All we need to do is not to spoil that. We have to let the collection speak for itself,” says Hazan, who readily admits that despite her fascination with the topic, she is not a fan of overwhelming museum goers with digital technology. “The quality of the objects and art works lies in their uniqueness. We have a fabulous collection and fabulous curators. We have to find a way to wrap it up and gently send it out into the world without killing it all with technology.”

THE MUSEUM has been forging its way into digital technology for years, she says, and one concern is to keep up with that quickly changing world. For example, she says, whereas 10 years ago virtual tours were all the rage, they are now advancing with the times and

A participant in the Tower of David digital conference Hackathon, which highlighted the possibilities of how museums can try to harness the brainpower of the Israeli hi-tech world to their own advantage, tries out a pair of Epson augmented-reality glasses. (Left) A panoramic view of the Tower of David Museum

the museum recently cooperated on Google’s Art Project with a digitalized human-sized robot panoramically photographing the museum’s entire permanent collection to go online, much in the same way as the Google Maps program does for locations.

In the late 1990s when the museum was a pioneer of computer use in the museum, they used a lot of interactive technology in the Youth Wings but soon noticed that all the attention was going to the interactives with little interaction with the actual objects. They felt they were doing a disservice to the object, she says. Things are different now, with a comfortable balance between object and interactive, she says.

“Kids who are on their iPhones and TVs all

Art

day are ready for something different, more solid, more authentic when they come to a museum. They need to meet the original Dead Sea Scrolls. I want people to throw the screens away and actually see,” Hazan says. “We are so saturated by mediated experiences, sometimes we simply need the real thing.”

At the same time, she acknowledges that for a museum to have a presence, it needs what is called an “integrated digital footprint,” which includes websites, apps, and social networks.

“Because if you are not there, you are not ‘there,’” she says. “If a museum has a fabulous collection, it has to amplify it, not distract from it. Other museums take up technology, perhaps with more enthusiasm, especially when they are less collection-driven. In the absence of a collection, you can tell your story through technology.”

Still, she says, the Israel Museum has compiled 1,103 of its exhibitions and 220 mini-sites online over 20 years and has interactive audio guides available to make the actual exhibits more accessible for visitors. They are always seeking the next layer of interactive technology to keep themselves relevant, she says.

THEIR CURRENT exhibit “Pharaoh in Canaan: The Untold Story” presents more than 680 objects telling the story of the cross-cultural ties between Egypt and Canaan. At the end of the gallery tour, the visitor can interact with a screen by translating their name from Hebrew or English into Proto-sinaitic script and sending it to themselves via e-mail. There is also an iPhone app that can be downloaded for this.

“All this technology is here and replace the originals [that is OK],” says Hazan. “You need to have a presence everywhere but not be ‘in your face.’”

The past few years have slowly seen an increase in the use of digital technology in Israeli museums, says Einat Sharon, director of New Media at the Tower of David Museum, and officer for the development of digital media for the Association of Museums and ICOM Israel, who initiated the idea for the Tower of David technology conference.

“Soon they will all have some applications because one, they have no choice and two, we have already passed the stage of realizing that if we don’t create technology, we will not remain relevant

in the 21st century,” says Sharon.

It is not easy convincing veteran Israeli curators who are attached to the old ways to introduce technology into their exhibits, Valentz admits. But if Israeli museums are to continue to draw in visitors and appeal to new patrons, especially from the younger generation, they are going to have to do some quick catching up.

“A seminar like this lets them explore the possibilities and also shows them that it is not the end of the world introducing such technology into their museums,” Valentz says, noting that most museum professionals come from the world of humanities and often find it a bit daunting to venture into digital technology. “It is important for them to understand that digital technology will not steal the show.”

Digital-tech people in Israel are also eager to create a partnership with museums that would give them greater market potential for the technology they are developing here.

“There is an infinite amount of things that can be used and have not been used yet [in museums],” says Alon Melchner, founder and president of Waking App, whose ENTiTi platform is a creation tool that simplifies the development of augmented and virtual-reality programs. “The main problem is educating the market that physically engaging their audience will increase their visitors.”

One thing that has been holding many Israeli museums back is the cost involved in digitally updating their exhibits since most get by on a shoestring budget with little or no government support to begin with, Valentz says.

Nevertheless, more Israeli museums are slowly beginning to incorporate digital technology into their exhibits, from larger ones like the Madatech science museum in Haifa and the Tower of David, to smaller ones such as the Rishon Lezion Museum and The Corinne Mamane Museum of Philistine Culture in Ashdod, where visitors can stand in front of a screen with virtual stone pillars and make them come tumbling down like Samson.

The key to working their way around financial constraints is for Israeli museums to start exploiting the rich resources they have here with start-ups, pairing with companies that need content for their product, notes conference keynote speaker Martin Pronck, head of the digital and publications department of the Rijksmuseum in Amsterdam, who was supportive of the efforts by Israeli museums to enter the digital world.

“It is only just starting in Israel, there is still yet a lot to be done; it is their first steps. But there are a lot of hi-tech companies here with technology but no content, so in theory that would be a very good match. Museums need outside people to take them to the next level so museums and other cultural heritage institutions should take advantage of this resource,” Pronck told the Report.

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Indeed, notes Yair Dovrat, a member of the Proverb trio group, which won second place in the Tower of David’s hackathon and also recently won first place in a Venice hackathon for museums run by the European Council, museums in Israel are not yet aware of the excellent resource they have right in their own backyard nor how to exploit it.

“Even though we won first place in Venice, it was not an easy fight here. It was much tougher and more challenging here because the technology is more advanced,” he says. “I hope [Israeli museums] will begin to become aware of this.”

Tapping into this home-court advantage, last year, the Tower of David Museum launched six different products in cooperation with various start-ups, including an Augmentiguide to be used from the top of Phasael Tower, says Sharon. The tablet-based visual and audio-mobile guide allows visitors to view up close 100 different landmarks in old and new Jerusalem. The museum also offers a children’s augmented reality game using iPads, a treasure hunt app and a QR-driven guided tour that gives them the ability to open up their archives for adults. The museum also received the bronze medal for its Virtual Tour of the Tower of David at the international audio-visual and new technology conference



COURTESY / FOZ MUSEUM

of the International Council of Museums in Budapest.

“Cutting-edge technology is very nice and gimmicky, but the technology is of no use if you have no content and here we have the perfect mixture. I think we have proven that even if you don’t have a budget, it can be done through partnership. The minute you open the door, people come, sponsors all come to you. It is fun and challenging,” says Sharon. “I hope people realize that this is a very interesting period for museums with the change from the old-style museum. It will become more and more interesting.”

In fact, she says, following the museum’s hackathon, one of the sponsors told the museum it was interested in advancing eight of the projects created that evening, which they felt were worthy of follow-through.

“It is time to bring this technology to Israel. Jerusalem is a center of tourism. It’s not always about a museum creating all new exhibits, but also about updating the exhibits without making a complete change. It doesn’t have to be all or nothing,” says Oren Fleisher, CEO of Epson Israel, the Israeli office of Epson Europe BV, which has developed augmented-reality glasses that already are used in museums and cultural centers in Italy and Japan among other countries.

The inclusion of digital technology does not always have to be something big or costly, notes Pronck. These days, museum visits extend before and beyond the actual visit, with patrons beginning and continuing their relationship with a museum through the website, Pronck notes, which at this point all museums should already have in place.

A young visitor touches an interactive 36-screen synchronized wall at the Friends of Zion Museum in Jerusalem

His museum reaches out in different ways to get potential visitors excited about their collections – including by the simple exploitation of the online love affair with cat pictures by posting close ups of beautiful cats from paintings in its art collection on its social media sites.

“We have no fear that people will stay away from our museum because they saw the artwork online,” he says. “These online postings are our visiting cards. You can’t compare them to the emotion you feel when you meet the real painting. Standing in front of Rembrandt’s Night Watch is a completely different thing than seeing it online.” ■