

Luna DNA Seeks to Blaze New Trail to Data

BIOTECH: Co. to Use Blockchain, Cryptocurrency to Build Database

By JARED WHITLOCK

At Illumina, Dawn Barry pushed the limits of DNA sequencing, from using the science to seek cures for complex diseases to the goal of resolving criminal cases. Her next challenge: blockchain-powered genomics.



Dawn Barry

Barry recently came on board as president of Luna
 → Luna page 39

Parking Biz Exec Stays Out of Tough Spots

SERVICE: Adapting to Change, Eye for Expansion Drive Success

By BRAD GRAVES

Keith Jones knows the lay of the land, and he looks like he knows it.



Keith Jones

Standing in a business suit outside San Diego International Airport, he attracts the attention of a traveler pulling a rolling suitcase. She wants
 → Ace page 32

Every Detail Matters in Hospital Seismic Retrofit

CONSTRUCTION: Difficulties Abound in Medical Environment

By JARED WHITLOCK

Hospital earthquake planning has kept firms in San Diego like Degenkolb Engineers busy in recent years, the result of seismic retrofit deadlines drawing nearer.

California law requires earthquake building code compliance from hospitals by 2030, or they can't provide acute care. The deadline is a ways
 → Hospital page 33

Photos by Stephen Whalen
 Steven Snyder, Fleet Science Center:
 Need to be entrepreneurial.

Museums Exhibit Self-Reliance

NONPROFIT: Institutions Shift To More Stable Business Model

BY EMMET PIERCE

Nonprofit museums are moving away from business models that rely heavily on traveling "blockbuster" exhibits to focus on strategies that require less financial risk.

"Some temporary exhibitions aren't as popular as everyone hopes they will be," said Judy Gradwohl, president and CEO of the San Diego Natural History Museum in Balboa Park. "What we're doing is focusing on in-house collections and exhibitions that allow us to highlight our content. It saves us money. It's much less expensive to produce our own exhibits. It allows us to be more experimental with our offerings."

Choosing exhibits that boost attendance and engage the public is a key component of a successful business model for museums. The majority of museums in the U.S. are nonprofits. They typically raise money by piecing together revenue from
 → Museums page 38

Micah Parzen and Tabitha McMahon, San Diego Museum of Man. Officials aim to create unique experiences.

Judy Gradwohl, San Diego Natural History Museum: Focus on in-house collections

3 Technology: Qualcomm Expects Big Returns Amid Takeover Bid



4 Finance: Fintech LoanHero Acquired By Atlanta-Based LendingPoint

10 Real Estate: Several Projects in Works to Serve Homeless and Low Income Tenants

THE LISTS Largest Philanthropic Gifts in S.D., Page 16

New Hires & Promotions

Let San Diego know about the talented winners you employ! Announce new hires, promotions, and awesome accomplishments.

ASCENT Successful Movement in the Community of Business™

THREE WAYS TO ORDER Click on the Ascent tab at sdbj.com, call Lucinda Lauridsen at 858.277.6359 or email llauridsen@sdbj.com

SAN DIEGO BUSINESS JOURNAL

Museums:

→ from page 1

government sources, private donations, and earned income, which includes ticket and retail shop sales, research services, and renting space for special events.

According to a 2016 national survey by the **American Alliance of Museums**, on average 35 percent of revenue for nonprofit museums is earned. Another 35 percent comes from contributions. Investments account for 11 percent, and government funding accounts for another 19 percent.

Risks of Traveling Exhibits

When a museum partners with a traveling exhibit, it often must make a financial investment that can be recovered only if the show is successful, Gradwohl explained. The owner of the exhibit typically is guaranteed a fee. If the turnout is less than expected, the museum must absorb the loss.

The cost of booking touring exhibitions can be between several hundred thousand dollars and \$1 million, Gradwohl said. Even when an exhibit is successful, the gains may be short-lived, since attendance can drop when an exhibit completes its run.

Museums typically measure the cost of staging exhibits in terms of square feet. The total expense is divided by the size of the space used. For a traveling exhibit, that typically works out to \$75 to \$125 per square foot at the Natural History Museum, officials said. In comparison, a temporary, in-house exhibit can cost between \$35 and \$85 per square foot.

When museums create in-house exhibits, there are many ways to reduce costs. In-house exhibits at the Natural History Museum, also known as “theNAT,” come from its permanent collection. An example is the current exhibit “Unshelved: Cool Stuff from Storage,” which features rarely seen specimens, ranging from insects to whale bones.

Among other factors that bring down the cost of in-house exhibits are use of own materials, labor and specimens; design to fit budgets; avoid fees set by travelling shows to cover the costs of designing, manufacturing, transporting, assembling, and disassembling exhibits; no payment of guaranteed fees if an in-house exhibit is less successful than anticipated; and no requirement to adjust to the dimensions of a traveling exhibit.

Going Back to Basics

The gamble that a museum must take to book costly traveling shows is too big to take, Gradwohl said.

“You win big or you lose big,” she said. “You rarely hold even. We’re trying to re-orient visitors to realize that any time you come, there’s going to be something special. We are, in a sense, going back to basics.”

Michael J. Montgomery, a principal at **Montgomery Consulting**, a Michigan-based philanthropy and nonprofit management consulting firm, said many museums around the country have reached the same conclusion about traveling exhibits.

Touring programs “can be costly to rent and in recent years many have failed to do the level of business that many museums need to justify their expense,” Montgomery said. “In response, many museums now develop some or all their temporary exhibitions in-house.”

Hunting Revenue

Museums always are on the lookout for new sources of revenue. The Natural



Photos by Stephen Whalen
Judy Gradwohl, president and CEO of the San Diego Natural History Museum, in front of the “Unshelved: Cool Stuff from Storage” exhibit featuring items from the museum’s storage.



Micah Parzen and Tabitha McMahon, San Diego Museum of Man CEO and CFO respectively, at the “Living With Animals” exhibit at the museum showcasing how animals influence diet and nutrition in different cultures around the world. The man and wolf sculpture depict early domestication of animals.

History Museum recently acquired a permanent liquor license, Gradwohl noted. This will enable it to broaden its appeal as a venue that rents space for special events.

“We’re expanding our food and beverage service,” she said. “That is another source of revenue. Our largest source of earned revenue is through our consulting services and we are hoping to expand those as well.”

The museum consults with local governments and developers to make sure that construction in the region doesn’t destroy fossils or restrict biodiversity.

The Natural History Museum’s operating annual budget has remained relatively consistent over the past decade, at about \$11 million to \$12 million. About one-third of revenue comes from exhibitions and public programs, one-third from contributions, and one-third from earned revenue.

About 52 percent of annual expenses are spent on exhibitions, education, and marketing. Twenty-nine percent goes for collections and research. Nineteen percent is spent for fundraising, membership, and administration.

Not All About Profit

Making ends meet requires museums to spend wisely, but calculating return on investments isn’t always easy. Because their missions require them to engage and educate the public, there often isn’t a dollar-for-dollar return on every expense. Not every program is expected to turn a profit.

Mission-oriented work includes contributions to scholarly journals. In 2017 the Natural History Museum’s researchers contributed 156 such articles. Another example is the “Canyoneering” program which offers free guided nature hikes to the public.

Focusing on the Mission

Whenever a museum develops a new program, in addition to being financially viable it must fit in with its mission. In the case of the Natural History Museum, the mission is to promote understanding of the evolution and diversity of South-

ern California and the Baja California peninsula.

Steven Snyder, president & CEO of the nonprofit **Fleet Science Center** in Balboa Park, said the basic business model for all nonprofit museums calls for finding ways to generate enough revenue to continue the mission. One of the Fleet center’s goals is to connect children and adults with the possibilities and power of science. However, people’s lives are so busy that convincing them to visit a museum isn’t easy.

“We are competing for people’s time and attention,” Snyder said. “There are so many alternatives and things you can do with your time. Our biggest challenge is ‘How do we make sure that what we’re trying to do is relevant with the community?’”

The Fleet center books a blend of in-house and touring exhibits each year, Snyder said. He acknowledged that balancing the cost of touring shows with anticipated revenue is difficult.

“The performance of those shows can be extremely different from city to city,” he said. “Sometimes what kills in Philadelphia can die in Chicago.”

Rather than relying on touring exhibits, officials at the neighboring **San Diego Museum of Man** count on in-house exhibits to draw the public to its historical building in Balboa Park. About eight years ago, the anthropological museum was in financial trouble, said **Tabitha McMahon**, the CFO. Attendance was down and costly traveling exhibits didn’t always earn back their costs.

To increase attendance and raise revenue, the museum changed direction. It began moving away from presenting traditional culture-by-culture exhibits. It developed programs that examined, compared, and contrasted cultures from around the world, explained **Ben Garcia**, deputy director of the museum.

Since then, the Museum of Man has created exhibits with unusual anthropological themes, such as “Cannibals, Myth & Reality” a history of cannibalism in cultures around the world, and “Mon-

sters,” an interactive children’s exhibit featuring mythological creatures from throughout history. What such exhibits have in common is a desire to create unique experiences, Garcia said.

“We wanted to deepen the embrace with the community and become sustainable financially,” said McMahon. “From fiscal year 2010 to 2017 we increased the admissions revenue by over 300 percent.”

A Never-Ending Quest

There is concern that federal funding for nonprofit museums could be reduced in the years ahead. Gradwohl said if funding were reduced for scientific research and cultural organizations, many of the partners and clients with whom the museum works would be impacted.

“In particular, we would see a trickle-down effect from reduced funding to agencies like the **U.S. Fish and Wildlife Service**, **Bureau of Land Management**, and even environmental programs within the **Department of Defense**,” Gradwohl said.

The potential loss of federal funding “underscores the importance of contributions from individuals, private foundations, and corporations to help fill the void left by federal support,” she added.

At the Museum of Man, McMahon said the focus is on demonstrating the value of its programs to all entities that provide funding.

“Renewed funding is something we don’t take for granted, and is something that we work very hard to maintain each year,” McMahon said.

The Big Challenge

For all public, nonprofit museums, solvency is a precondition for success. All museums struggle to varying degrees with giving people reasons to visit, said Montgomery, the consultant. Even successful museums work hard to keep revenues up.

While educating the public and achieving academic recognition are important goals, the difference between success and failure often is having enough revenue to keep the doors open for another season. At the Fleet Science Center, about 85 percent of the annual budget comes from earned revenue, well above the national average of 35 percent. Even so, officials know there are no guarantees when it comes to museum finances. The quest to remain solvent never ends.

“Our overall position is good (but) the pressure is absolutely there,” Snyder said. “We have to be very smart about how we run our business.”