

The Soft Power of Ephemeral Communities

A Short History of Las Vegas Technology Conventions, 1959-2019

JULIAN KILKER

INTRODUCTION

At the huge 1999 Comdex¹ trade show, the Philips Corporation, one of the largest technology companies in the world and codeveloper of the compact disc, mounted a spectacle in front of a standing-room-only crowd. Four actors portraying a nuclear family danced through a cutaway two-story house, singing the praises of the company's products situated in each room of the structure (FIGURE 1). Comdex was at its peak; it had already forced the Las Vegas Convention Center to expand, launched casino-magnate fortunes, and set the standard for marketing technology in the late 20th century. It was a successful example of marketing Las Vegas as a convention destination, emphasizing "soft power" approaches—ones that operate indirectly through social bonding among convention participants, the ability to network with and learn from competitors, and informal coordination in and out of the convention center. Every November, when the convention took place, *Smithsonian* wrote in July 2001, Las Vegas's "glitzy stage productions are dwarfed by the biggest extravaganza of them all: Comdex."² But by 2004, Comdex had collapsed, a victim of shifts in technology marketing, post-9/11 travel requirements, and perceptions of value. Little formal record remains of Comdex, a trade show that for 24 years was central to marketing computer technology and the development of Las Vegas convention expertise.

This article presents an overview of the large Las Vegas-based technology conventions: Comdex, CES (the Consumer Electronics Show), and NAB (the National Association of Broadcasters trade show). Conventions have become a key driver of the Las Vegas economy, while at the same time remaining under researched. Technology conventions are notable because they are triply ephemeral—in a transient town with an ahistorical sensibility, they cover fast-paced

An Associate Professor in UNLV's School of Journalism and Media Studies and in the UNLV Honors College, Julian Kilker graduated from Cornell University (PhD and MS) and Reed College (BA). His work focuses on media technologies and innovation, and he has published in *Visual Communication Quarterly*, *Social Identities*, *Convergence*, *IEEE journals*, *Leonardo*, and *The Public Historian*, among other journals.



FIGURE 1. The Philips domestic musical, in a two-story booth, attracts a crowd at Comdex 1999. The image quality is typical of the era's attendee photographs. Photograph by Julian Kilker.

market segments using a format that, over a period of days, brings together special-interest groups whose members reconnect periodically. All three of the involved parties—the city, the technology industry, and the event—promote the future over the past, and their intertwined ephemerality poses challenges and opportunities for researchers and historians.

Although conventions have a historical lineage that extends to world's fairs and exhibitions, the public marketplace, and even the central commons, the very nature of the convention is anti-historical. Like Las Vegas, conventions focus on future possibilities, products, and markets, all with a limited, nostalgic view of the past. An analytical understanding of context is necessary, however, for Las Vegas and its conventions to adjust themselves in response to emerging technologies and marketing trends. Ephemerality and transience facilitate the ability to reinvent, but they also pose challenges for understanding Las Vegas and its conventions.

When convention experiences fall into a memory hole, we lose recollections that might inspire ideas for future gatherings. For researchers and historians, collaborative techniques such as the swarm approach can help document and better preserve the features of these temporary yet complex events.³

After a history that is at once storied, stereotyped, and under documented, two decades into the 21st century, the Las Vegas convention industry finds itself again at a crossroads. While conventions occur in a specific destination, such as Las Vegas, they are designed in a standardized format, one that could be presented in a generic convention facility in any city.⁴ Even in the best of times, conventions are difficult to justify: Howie Wilcox, with 20 years of trade show experience, starting in 1984 as a product engineer and later salesperson with HP, Silicon Graphics, Sun Microsystems, Network Appliance, and Cray Research, notes that:

If you were to ask people to use an intellectual justification for the trade shows, they would really struggle.... Trade shows are believed by a lot of people in various niches of technology to fall into this category of really, really hard work and expensive work that we do for reasons that we're not really sure of. It's almost...it's almost a ritual.⁵

The convention experience is subjective and multifaceted, metrics used to evaluate and justify participation capture only fragments of the experience, and participation involves motivations beyond promotion. Conventions—especially those with a spectacular trade show component—bring together crowds interested in entertainment, information, and social interaction. Las Vegas, isolated and with a risqué image, faced many formidable competitors for the convention business.

THE EVOLUTION OF THE LAS VEGAS CONVENTION

Las Vegas has a long history of commercially benefitting from technological spectacles. Founded as a town in 1905 when the Union Pacific Railroad auctioned parcels of land, Las Vegas served as a railway rest stop and water source almost halfway between Salt Lake City and Los Angeles; by the early 1930s, a small downtown surrounded the railway station. The Overland Hotel at Main and Fremont Streets, rebuilt after a devastating fire in 1911, can be seen in a 1930s-era photograph with a large painted sign on the second story advertising a “Big Free Sample Room” where salesmen could display their products; this was a “precursor to [the resources] provided to modern convention vendors.”⁶ In the mid-1930s, tiny Las Vegas benefited from an influx of tourists interested in the impressive Hoover Dam construction site. Las Vegas also hosted its first major convention at this point—5,000 Shriners, brought in by train from Los Angeles.⁷ Las Vegas’s national reputation was colored by Nevada’s legalization of gambling on March 19, 1931, and on the same day, the reduction of residency required for divorce was scaled down from an already-scandalous three months to an outrageous six weeks, the most lenient in the U.S.⁸ While isolation made Las Vegas’s commercial existence politically palatable despite this reputation, it complicated travel to the city. Early convention-goers arrived by car from Southern California or on multiday train rides from the eastern states. Efforts in the 1930s by the chamber of commerce promoted Las Vegas as a place to host small conventions in an “atmosphere that promised to recreate the frontier spirit of the Old West.”⁹

Las Vegas’s economy grew during World War II with the Las Vegas Gunnery School and Basic Magnesium plant, but local business leaders realized that to remain successful in

a postwar economy, they needed to promote the city to potential tourists. In 1944, Maxwell Kelch, president of the chamber of commerce, pushed hard for members to donate between 1 and 5 percent of their income to a “Live Wire” publicity fund to promote Las Vegas as a travel destination.¹⁰ This funding mechanism set a precedent for the later funding of the Fair and Recreation Board and the Las Vegas Convention Center.

1955–1979: BIRTH OF THE LAS VEGAS CONVENTION CENTER

Although the idea of a convention center for Las Vegas had been discussed as early as 1949, the events of 1955 were what made the project possible. Balancing the resources needed for conventions and the traditional Las Vegas industries—gambling and entertainment—was initially challenging: by 1955, casino and lodging businesses had been overbuilt, and Las Vegas was in a slump, one that was embarrassingly covered in the national press.¹¹ This provided the impetus to act on earlier interest in a convention center. Prompted by Commissioner George Albright, Clark County proposed Assembly Bill 424 to create a Fair and Recreation Board, a public-private partnership with the power to tax and raise bonds to support marketing and the construction of a convention center. It was approved by the Nevada legislature on March 29, 1955.¹²

With savvy politicking and careful business planning, Albright was able to convince hotel owners and the public to support a tax on visitors, not locals, based on hotel- and motel-room revenue. During the mid-to-late 1950s, balancing the daily number of visitors became a challenge. While business boomed during weekends, far fewer tourists visited the city on weekdays. The Fair and Recreation Board was an attempt to balance uneven visitation with a steady flow of weekend events. Local residents would respond to periodic requests from the city for volunteers to house conventioners, not known for gambling, when hotel rooms were overbooked or reserved for serious players.¹³

Construction of the modern convention hall began in 1957, one block east of Las Vegas Boulevard, on a plot from the failed Las Vegas Park Speedway, a horse- and automobile-racing facility. The air-conditioned property¹⁴ consisted of an exhibit hall and meeting rooms with “130,000 square feet of floor space, all on ground level,”¹⁵ anchored by a “space age” domed rotunda that, especially when illuminated at night, was strikingly similar to a flying saucer from a 1950s B movie. An early version of the rotunda graced the cover of the expensive, full-color brochure draft designed in 1958 that featured a die-cut dome curve protruding from the upper edge (FIGURE 2). Sands resort publicist Al Freeman proposed distributing 100,000 of the brochures nationwide to emphasize that “Las Vegas has certain unique advantages over established convention cities such as NY, Chicago, SF, and Miami. . . . We cannot compete in size or access. . . .but we can offer more entertainment and recreation facilities than the cities above combined. . . .steady fine weather all-year around. . . .facilities open 24 hours a day. . . .great natural tourist attractions and facilities.”¹⁶ Based on the convention experience from San Francisco, Los Angeles, and New York City, Freeman’s notes estimate that five trade shows or fairs (at 25,000 people each), two conventions (10,000 people each), and 40 smaller conventions per year would need to be booked annually based on the convention hall’s \$4 million cost.

Although cowgirl Vegas Vickie was used in the brochure, the rotunda and center’s modern design was part of an important shift in Las Vegas branding. No longer was the focus on rustic Western themes of early Fremont Street properties and El Rancho; Las Vegas was firmly betting on the future, with modern architecture in the convention center. The “Welcome to Fabulous Las Vegas” sign, a classic example of futurist Google architecture, was built in May 1959. The

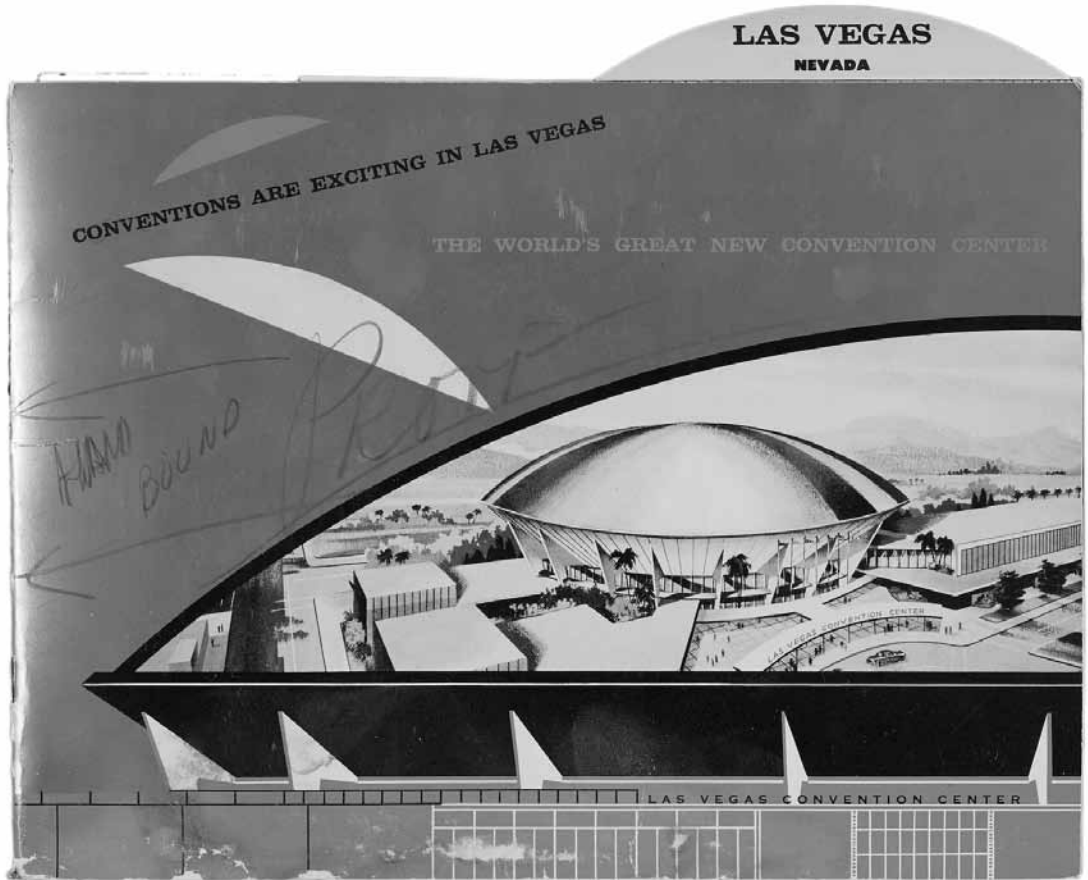


FIGURE 2. The Las Vegas Convention Center brochure, 1958. (UNLV Special Collections)

Sands tower, which started in 1963 and took five years to complete, adopted similar curvy forms. The future orientation was important for attracting modern, international conventions and trade shows, especially those focused on new consumers, media, and computer technologies.

The convention center's first major event was the World Congress of Flight, held April 12–19, 1959, and it incorporated the center's formal dedication ceremony on April 18.¹⁷ Taking advantage of Nellis Air Force Base's proximity, Nevada senator Pat McCarran's influence on aviation before he died in 1954,¹⁸ and the region's near-perfect flying weather, the 6,000-in-vitee event was an ideal opening for the new convention center. It brought together locals, tourists, and military representatives, people from 77 countries, and used the convention hall and nearby airfields where international aircrews demonstrated their aircraft's flying and bombing capabilities, as documented in an Air Force news reel.¹⁹ Besides opening the new convention center, the World Congress of Flight featured another technology that would change the future of Las Vegas: a Boeing 707 airplane, the first American commercial passenger jet. Jet travel was critical in expanding Las Vegas's reach; it made the city a strong competitor for national conventions, because attendees could travel longer distances comfortably and affordably. With jet travel, a greater proportion of a visitor's time and money would be spent in Las Vegas rather than on the road.²⁰

The rotunda's futuristic design was multipurpose, reflecting an uncertainty about the mix of functions it would host in addition to conventions and trade fairs. A boxing event would shortly follow the World Congress of Flight, on May 1, 1959 (the first of several major matches over the years). The Beatles performed two shows at the center on August 20, 1964, after audience interest exceeded the original casino venue's capacity, and the rotunda welcomed a wide array of civic and entertainment events.

Despite the earlier efforts of the Live Wire fund, city publicists struggled to convince convention planners and attendees to use the city's resources based on its Sin City image, especially when compared with its major U.S. rivals. Las Vegas built a highly professional convention infrastructure emphasizing service, entertainment, and economic value, the areas in which it could favorably compete. Letters from organizations praising Las Vegas as a convention site were solicited in support of promotional campaigns both in the buildup to the convention center and during its operation. Al Freeman, the Sands publicist, stressed that the 1958 convention-center brochure use the best mail and letters (such as the "Westinghouse convention letter, which was a lulu") to reinforce "[b]igger attendance, exciting conventions, finer entertainment, more recreation, more women's activities, better business sessions, etc."²¹

In 1967, as Las Vegas tried to attract more national conventions, the Clark County Fair and Recreation Board officially changed its name to the Las Vegas Convention and Visitors Authority.²² In the following years, Las Vegas would continue to receive letters that not only testified to successful events in the city but also suggested the entrenched challenges of marketing it as a convention destination. In 1968, G. Marvin Shutt wrote: "Until we held our NSGA [National Sporting Goods Association] Western Market in Las Vegas in 1966, we had a firm policy against holding any meetings there.... Since there are plenty of things to do in Las Vegas—at night—we had good attendance in the exhibit hall during the day.... We had absolutely no trouble with the union help or anything of that kind.... In fact, compared with Chicago it was downright cheap."²³ Similarly, in 1971, the past president of the National Institute of Dry Cleaning noted that in encouraging his organization to use Las Vegas, he found "criticism...in pushing Las Vegas as a site. It was surprising how the uninformed seemed to harp on the same points" which included: "Las Vegas is too hard to reach," "Midnight shows would attract the members and few, if any, would show up for morning speakers," "Slot machines would captivate and hold the crowd from the afternoon exhibits," "Members would lose their shirts and blame the organization," "Las Vegas is a 'Sin City' and would embarrass the more timid members," "It cost too much to exhibit...as far away as Las Vegas," and "My Gawd! Las Vegas?"²⁴

The tension between the spectacular and the seedy was also present in popular media representations in which Las Vegas evoked images of debauchery, while conventions were associated with commercialism (often crass), promoters (often anxious), and anomie (often destructive). The combination of the two is particularly dehumanizing, as if the city and the events were free of normal social constraints. We see this in popular portrayals of Las Vegas conventions, including the law-enforcement convention in Hunter S. Thompson's 1971 book *Fear and Loathing in Las Vegas*, in which authoritarianism and paranoia are pharmaceutically intertwined, and, 30 years later, in a funeral-directors' convention in a 2001 *Six Feet Under* episode, "The Trip," in which the protagonist has a sordid sexual encounter. However, most representations were more playful (if suggestive) over the years: the Las Vegas News Bureau provided cheesecake and entertainment photos to U.S. newspapers,²⁵ and Al Freeman famously arranged for the Sands to be prominently featured in popular music, radio and television shows, and films (such as the *Ocean's Eleven* of 1960). In these representations, Las Vegas's entertainment options were featured over business possibilities.

1979–2003: GROWING UP TOGETHER: BIG CITY, BIG TECH, BIG CONVENTIONS

The population of Clark County (Las Vegas and the surrounding area) grew dramatically from about 8,500 people in 1930 to 463,000 in 1980 to two million in 2000.²⁶ During this period, new technologies and markets boomed. The semiconductor transistor was invented in 1959, Tandy bought Radio Shack in 1963 and expanded its network of hobbyist electronics stores, and Intel released the first general-purpose microprocessor in 1971. Entirely new consumer electronics and computer industries were developed based on the new semiconductors: MITS (Micro Instrumentation and Telemetry Systems) launched the personal-computer market when it produced the Altair 8800 microcomputer kit in 1975, followed shortly after by the first assembled personal computers from Apple, Commodore, and Tandy in 1977. Peripherals and computer-networking technologies such as Ethernet were released in the late 1970s, followed by public-access dial-up services CompuServe and the Source in 1979 and AOL in 1983.

These growing and increasingly complex technology-product sectors drove the size of trade shows in the late 1970s. Consumer electronics and computer technologies were transportable, rapidly changing, high-value products that benefited from being seen and experienced in one place. Participating in a convention with a trade show floor gave vendors, dealers, and customers a chance to test and compare new products, check that those using the latest technical standards successfully operated together, and meet to discuss emerging technology and industry standards.

Three large technology shows found a home in Las Vegas: the Consumer Electronics Show (CES), Comdex, and the National Association of Broadcasters. CES started in 1967 in New York City, moved to Chicago in 1972, and added a winter show in Las Vegas in 1978. Then, in 1998, the Las Vegas Convention Center started hosting what became the CES annual show. Comdex started at the Las Vegas MGM Grand (now Bally's) in 1979. The next year, Comdex expanded threefold and was held in the larger convention center. According to computer columnist and science-fiction writer Jerry Pournelle, by the "third or fourth year, they had to build the West Hall, Comdex paid for an extension to the Las Vegas Convention Center. And it kept getting bigger and bigger."²⁷ The National Association of Broadcasters convention started at the convention center in 1991. These technology events thrived on marketing to a critical mass of vendors, visitors, and media.

As conventions grew, local casino operators again worried that conventioners would shut out more profitable tourists and that they would not gamble.²⁸ Similar concerns about visitor profiles continued over the years: Would certain types of conventions, such as those with predominantly female attendees, be beneficial or harmful for Las Vegas? Would technology trade shows such as Comdex attract introverted, unprofitable attendees who would not appreciate the city's offerings? While hotels and specialized services could and did raise their rates during conventions, the gambling and tipping behavior of Comdex attendees was closely scrutinized by employees who depended on the income.²⁹

Comdex's value to the technology industry was clearer: it was essential for launching a new computer business, and the show was a morale booster for companies with a successful product. Peachtree launched its famous accounting software on the periphery of the first 1979 Comdex: "We didn't even have a booth; we sat in the bar of the MGM Grand and talked to all the manufacturers and so forth. We did a ton of business out there.... That was the way you did business at Comdex in those days. You'd go to a restaurant and have a nice dinner."³⁰ At the 1982 show, Lotus sold \$3 million worth of its new 1-2-3 business software, exceeding the company's expectations for the show, according to Lotus's Jonathan Sachs. "We didn't really have any idea if the company was going to succeed or not," Sachs said. "Then after Comdex, there was absolutely no question. Everyone was kind of re-energized. So it made a huge difference to the way it felt."³¹

The growth and standardization requirements for large conventions strained the aging rotunda, and the November 1990 Comdex was its last event. For 30 years, the rotunda had hosted locals and visitors enjoying rodeos, college basketball games, presidential speeches, and high school proms—in effect, acting as both the city’s town hall and a home for visiting conventioners. It had displayed technologies from the early, crude transistor radio to the launch of Adobe Photoshop and the World Wide Web. In an elegiac article about the last Shriners circus in the rotunda, in September 1990, just before Comdex, facilities manager Tom Smith said, “The roof leaks. It requires continual maintenance.... Our trade shows are getting larger and we need to expand. A round building just doesn’t work for trade shows.”³² The rotunda was torn down in February 1991 as part of a \$50 million investment to modernize and expand the convention center’s floor space from 1.1 million to 1.3 million square feet, this time entirely in a standard rectangular floor plan.³³

Other large convention facilities were built in Las Vegas. Sheldon Adelson cofounded Comdex and made his fortune renting convention-hall space in bulk at low cost (25 cents per foot) and then reselling it to vendors for the show at 100 times the cost. He then invested the profits back in the Las Vegas convention business: he and his partners purchased the Sands Hotel and Casino in 1989 and built the Sands Expo and Convention Center next door in 1990; it was the largest privately owned exhibition space in the U.S.³⁴ The timing is notable. Las Vegas was entering an optimistic phase after two decades of declining tourism, due in part to legalized gambling in Atlantic City, New Jersey, and the aging of Las Vegas casinos. In quick succession, Steve Wynn’s modern 3,000-room Mirage opened in November 1989 (the first major resort since the original MGM Grand in 1973), followed by Circus Circus’s 4,000-room family-themed Excalibur in June 1990. Wynn’s Treasure Island opened in October 1993 with another 2,800 rooms. These and subsequent megaresorts dramatically increased Las Vegas’s room inventory for convention attendees and tourists and experimented with various themes and levels of family friendliness. In 1995, Adelson sold Comdex to Japan’s Softbank (a technology conglomerate), imploded the aging Sands Hotel in 1996, and in its place erected the Venetian Hotel in 1999 to explicitly target both convention and gambling guests.

By the year 2000, Las Vegas was second in North American convention business only to Orlando, Florida, holding nearly 600 large exhibitions that year. Technology shows such as CES, Comdex, and NAB had ballooned in scale, and Las Vegas could host them because of its substantial transportation, lodging, and dining infrastructure, as well as its comprehensive support services. Large technology conventions mirrored the growing city outside: the show floor resembled a pop-up suburban neighborhood, an environment based on standardized units of space (area of floor space), organized in neighborhoods by area of interest (and the ability to pay fees), with structures of varying prominence and sophistication facing central “streets” to act as corridors for its temporary citizens. The load-in/load-out strategies needed for shows were complex, competitive, and demanding. A convention’s trade show floor would be assembled, used, and then disassembled over a very short period, leaving an empty space ready for the next event. As with the housing market, the value of floor space would go through booms and busts: unsold floor space would be roped off or rented to marginal firms, providing chair massages or tourist memorabilia, or turned into open commons spaces.

Booths were assembled by specialized installation-and-display contractors, staffed by Judy Venn’s models and hostesses, photographed by Oscar Einzig photography, wired by Trade Show Electrical and Smart City’s phone and internet connections, and decorated with flowers by Spring Valley Floral. These companies had local offices in other major convention cities to provide a standardized planning experience.

But Las Vegas was special. According to exhibit planner Tina Wentz, who from the mid-1980s to mid-1990s planned about 20 major shows in multiple cities, Las Vegas was “friendly...[people]

want you to be happy instead of not caring how you feel about the town” in contrast to New York and Chicago, which could be “rough towns to work in, especially if you don’t go about things the right way.”³⁵ For her, a remarkable feature of Las Vegas was that “there’s a vendor for everything” available at a moment’s notice, an echo of Freeman’s 1958 claim that the city featured “facilities open 24 hours a day.” Wentz remembers a colleague who was unhappy with his company’s booth signage just before a Comdex show:

[He] looked at me and said, “You know, I’m gonna go neon.” And I said, “Oh, you are?” “Yeah, I’m gonna go neon.” And honest to goodness... I went with him to a shop where the man who did the original programming for the Flamingo was... and they whipped him up a great little neon thing to be installed in his header (the thing at the top of your booth with your logo). “That’ll be ready before the show starts. Come pick it up in two days.”³⁶

During the early-to-mid-1990s, with increasingly competitive and professional services and the burgeoning technology economy, the fees for participating in conventions skyrocketed. Wentz recalls planning a 12,000-square-foot booth at “\$35 or \$45 per square foot for the concrete alone.... The next thing that you put on top of the concrete is your electrical, and that’s always done by the show electrical contractor and that’s not negotiable... And then they put down the carpet.”³⁷ In addition, a rugged and transportable booth needs to be designed and constructed, at the cost of a house—\$125,000 for a 20-by-40-foot two-story booth with a kitchen and running water.³⁸ “In 1990, that was a lot of money for a booth. Now [in 2007] it’s nothing.”³⁹ Las Vegas contractors such as carpenters could pivot from building the growing city to constructing temporary booth structures. The fine detail and rushed schedules required by convention clients made these projects more difficult than residential or hotel projects, but also much more lucrative.

The largest trade shows, such as Comdex in its heyday, attracted approximately 200,000 attendees and had begun to require specialized electrical and computer-network infrastructure. By 2006, CES welcomed 150,000 visitors and used four convention halls and multiple hotels connected by an extensive but temporary bus network. That year, Las Vegas convention halls and meeting spaces together comprised about nine million square feet (a floor space equivalent to 4,600 typical U.S. homes), attracted over six million attendees, and, according to the Las Vegas Convention and Visitors Authority, infused over \$8 billion dollars into Nevada’s economy.⁴⁰ Ten percent of first-time Las Vegas visitors over the previous several years had visited the city to attend a convention. The scale of these technology conventions had become so large that, like car drivers using AAA road maps and a GPS, attendees to CES 2008 navigated through the massive halls using five fanfold maps and an online itinerary generator.

CES grew in part because it gathered a portion of the exhibitors and attendees left behind when Comdex closed in 2003 after more than two decades of successful exhibitions, a victim to post-9/11 travel fears and the lingering dot-com slump, increased specialization in the computer industry, and skyrocketing exhibition costs. Engineer and salesperson Howie Wilcox recalls that during the mid-to-late 1990s:

...costs to exhibit at Comdex and for these other shows probably went up five times... astronomical increases every year. I think booths that might have been going for \$30,000 may have been going for \$200,000.... That is sort of how the trade show guys got into so much trouble in the end. I think the reason trade show attendance has fallen off so much is that they partially killed the goose that laid the golden egg.⁴¹

Wilcox suggests that exhaustion among conventioners also played a role in the collapse of Comdex. By the late 1990s, frequent travel and diminishing returns had burned out several of his colleagues:

[W]hen I heard that the wheels were falling off of Comdex, I was able to look back on the last 15 years and think about my personal experience.... Maybe it's better for people not to spend so much time running around the world every year, every quarter, every month to these shows and meetings and stuff. I'm not sure just how much awareness, extra awareness that you create by having 200,000 people come to Las Vegas in November and...you know, in this day and age with mass communication, the Internet, with the trade journals, I think they sort of cover it pretty well.⁴²

The value of the convention was being called into question again, not only for economic and social reasons but because the communications products that the technology conventions promoted were beginning to undermine the need for the events themselves. Why travel and pay to attend a convention when emerging multimedia technologies could partly substitute for the experiences?

2003–2019: REDEFINING THE CONVENTION

The official 40th-anniversary theme of the CES 2007 show was counterintuitive for an event focusing on the future of consumer electronics: it was historical, looking back to the first 1967 meeting in New York City. San Diego-based exhibitor Qualcomm faced a difficult marketing challenge because, as a vendor of components and patents essential to mobile phones, its technologies were invisible and unexciting to consumers. Intel, facing a similar visibility challenge with its microprocessors, developed the famous "Intel Inside" sticker campaign in the early 1990s. How could Qualcomm engage with passersby to communicate its brand?

Qualcomm built a booth in which its valuable corridor-adjacent space was devoted not to new products but to an archeological dig. Safari-suited sales representatives delicately excavated obsolete computers, games, and equipment from hundreds of pounds of gravel in front of passing crowds, chatted with attendees—and then surreptitiously reburied the artifacts (FIGURE 3). The display was clearly effective: it stopped the typically jaded convention-goers, some of whom also, to the surprise of booth personnel, offered to buy the obsolete technologies rescued from the Qualcomm employees' garages.⁴³

Just as Qualcomm linked old technologies to innovative future products, CES organizers hoped to remind participants of the past and the continued value of the event; this was particularly important given the recent demise of Comdex. While the CES 40th-anniversary theme communicated the show's past value,⁴⁴ questions about the return on investment for participating in large trade shows and the suitability of Las Vegas as a convention destination continued to require attention from convention organizers and Las Vegas promoters. City, county, and state officials used marketing and legal efforts to temper the Sin City reputation; in 2004, in a notable example of these efforts, the Nevada Gaming Commission fined the Las Vegas Hard Rock Hotel Casino \$100,000 for "inappropriate" sexualized advertising two miles south of the convention center.^{45, 46}

Convention organizers delivered value by controlling media access and helping participating companies execute their public-relations strategies. Comdex and CES provided the forum and critical mass of media to announce major technology news: Microsoft announced



FIGURE 3. Excavating technology and interacting with attendees at the CES 2007 Qualcomm booth. Photograph by Julian Kilker.

the Windows 95 operating system at Comdex, the VCR was announced at CES 1970, the compact disc player at CES 1981, and the DVD player at CES 1996. Like the Las Vegas spectacles outside the convention center—the atomic blasts, building implosions, erupting volcano (at the Mirage starting in 1989), and dancing fountains (at the Bellagio resort starting in 1998)—showstopper trade show spectacles such as the Philips home and the Qualcomm dig, as well as superlative product announcements, attracted both attendees and the press. CES became known for an almost comical television-size race: in 2006, Panasonic had the largest flat screen, at 103 inches; in 2007, Sharp's was 108 inches; and in 2008, Panasonic took the title back with an impractical 150-inch screen that garnered extensive coverage. According to Wilcox, similar announcements also occurred at Comdex:

A lot of big deals would be announced at Comdex. We would announce these gigantic deals. And it would almost seem to the outside world like, you know, wow! Maybe they just cut this deal two days before Comdex. But the truth is, you know, anything but that. The deals could be cut whether Comdex was there or not. But we needed to try to create that image that we came to the trade show and launched our new product and look at all these customers we've got. And the trade show is kind of an opportunity to do that.⁴⁷

The value of both conventions and visiting Las Vegas faces increased scrutiny when alternatives that are more cost-effective become available, especially during periods of economic uncertainty. For Las Vegas, viable alternatives include online gambling or casinos on Native American territories or in Atlantic City or Asia. For conventions, the alternatives include downsized, specialized events or online media blitzes. In 2007 and 2008, the *New York Times* published cautionary articles about the dizzying costs of attending CES. The paper's front page on January 6, 2007, reported that Digeo, a small Washington State digital-media-player company, spent between \$500,000 and \$1 million for floor space, a booth, hotel costs, food, and advertising;⁴⁸ the article also reported that skyrocketing food, lodging, entertainment, and transportation costs in Las Vegas during these events strained company budgets. It is not surprising that trade shows reported a drop in floor space, exhibitors, and attendance during and after the 2008 Great Recession. It took four years to start recovering after the 5 percent drop in convention attendance (from 6.2 million convention attendees in 2007 to 5.9 million in 2008) and a huge 24 percent drop from 2008 to 2009 (to 4.5 million convention attendees). Midweek occupancies at Las Vegas hotels dropped to 78 percent in 2009 and 2010, the lowest since the 1991 recession and Persian Gulf War. (In comparison, in 2018, typical midweek occupancies were 85.5 percent, and Las Vegas conventions welcomed 6.5 million attendees.)⁴⁹ At the time, in 2009, *Tradeshow Week* reported that "it's not much of a stretch to say that Las Vegas was assigned the unfortunate role of scapegoat in the business-meetings backlash"⁵⁰ after President Obama cited Las Vegas junkets in a speech emphasizing corporate responsibility.

While companies reduced their convention expenses by meeting in off-site hotel facilities rather than exhibiting, digital technologies provided new ways to undermine and counterprogram the expensive convention and its traditional marketing approaches. At CES 2007, press coverage and buzz was distracted in the middle of the show's run, intentionally, by Apple CEO Steve Jobs announcing the iPhone at the simultaneous MacWorld show in San Francisco. This precisely timed announcement, transmitted to the show floor in Las Vegas by cell phone, Blackberry, and Internet access, became a talking point and a distraction among CES attendees.⁵¹

Major shows such as CES had been covered by professional mainstream and trade journalists, and CES typically garnered the equivalent of several full print pages in the *New York Times*, as well as extensive coverage on its website. But attendees increasingly posted their own impressions, images, and recordings online during the event, bypassing the traditional relationships among convention planners, companies, and journalists. Around 2005, shows began to tentatively credential "new media" contributors. At CES 2008, bloggers were provided special badges and second-class resources that paled in comparison with the traditional press rooms stocked with racks of press releases, interview booths, rows of computers, coffee urns, and free lunches.

The friendly, symbiotic relationship between show exhibitors and the press was challenged by these new-media contributors, who had influence online but acted less predictably than traditional journalists. Credentialed Gizmodo.com employees, for example, notoriously used a hidden "TV-B-Gone" remote control to turn off displays at booths and during a critical presentation. When they posted a video of the results,⁵² the troublemakers were (briefly) banned from future CES events—but the video gained over half a million profitable views in three days. Pranking had become the new, inexpensive-to-produce spectacle. Social-media comments about the prank ranged from disgusted to amused, suggesting the wide gaps among key groups that attend these shows: traditional and new-media contributors, young and old engineers, and marketers.

During a period in which the gatekeeping function of the traditional press was being disrupted by new media and fragmented perspectives, conventions faced similar challenges to their own gatekeeping assumptions. The reinvention of the convention has paralleled the rise of social me-

dia, which has come to play an integral role in convention planning and auditing. In 2019, without formally participating in CES or contributing to the Las Vegas economy, Apple inserted itself into the event's social and mass-media coverage. The company covered a building's façade with the Las Vegas-themed message "What happens on your iPhone stays on your iPhone" facing arriving CES attendees. Attention is the core commodity for both the city of Las Vegas and conventions. For Apple—in early 2019, the most valuable company in the world in terms of stock⁵³—there was more value in pranking CES from afar than in physically participating in either the 2007 or the 2019 shows. The design of recent CES exhibits suggests that large technology conventions increasingly serve as a stage for creating virtual and social-media content for people not attending the events, potentially reducing the need to attend. In addition, experiencing exhibits in person is less necessary when vendors are demonstrating services or software that can be researched, tested, and consumed remotely. For these reasons, future conventions and trade shows will likely face increasingly virtualized convention functions and a renewed focus on the original Las Vegas soft-power benefits.

THE ENDURING SOFT POWER OF THE LAS VEGAS CONVENTION

For Nevada, developing a professional convention infrastructure helped diversify its visitor mix despite the challenges of balancing its edgy Sin City image with its professional customer-service orientation. For exhibitors, the value of participating in the large, complex, and ephemeral convention is difficult to evaluate, even with the traditional institutional metrics of event attendees, contacts collected, and media buzz in column inches, impressions, or social-media likes.

The most important value for conventions may well be their soft-power aspects, which are difficult to commercially evaluate and market. Wilcox mentions the social aspects of conventions as their key advantage:

As much as everybody would...complain about the costs and the time ... people would sort of enjoy [each show]. It was a bonding experience, and it was used as an opportunity to have district sales meetings, regional sales meetings. It was used as an opportunity to do training, you know, because you've got everybody together, and it was used as an opportunity to check in with people who were technically in the field working independently. [The shows are] neutral territory.... It wasn't corporate people coming out to the district, and it wasn't sales people going back to corporate. It was someplace else.⁵⁴

These social functions resonate with the entertainment and recreation offerings that Freeman noted in his 1958 convention-center promotion memo and in which Las Vegas continues to specialize.

Architecture critic Paul Goldberger notes that "convention centers are supposed to revive cities.... But the more gargantuan they become the less happily they fit into the places they are intended to benefit."⁵⁵ In Las Vegas, home to "gargantuan" casinos, the convention centers found an ideal match. Nearly unique among major convention locations, the glitter, entertainment, clamor, and entrepreneurial atmosphere inside a typical event is reflected on the outside as well in the city's casinos and on the Strip. Las Vegas conventions, like the city itself, continue to navigate changes and pressures from multiple sources, including the global economy, national politics, and cultural mores—not to mention an often-chaotic array of exhibitors and specialized services, trades people, attendees, and both traditional and emerging media.

NOTES

¹COMDEX is an abbreviation for "Computer Dealers' Exhibition" but is commonly written Comdex, used here.

²David Devoss, "The Trade Show of Shows," *Smithsonian*, July 31, 2001, 30.

³Julian Kilker, "Exploring a new methodology: Background, planning, and lessons from the 2007 trade show 'swarm' project," *Social Identities* 15, no. 4 (2009): 433-446.

⁴In this paper I use "convention" because it includes trade shows, congresses, and special events, especially when there is a strong conference component; I use "trade show" when the event's main activity is on the trade floor.

⁵Howie Wilcox, interview by author, Henderson, NV, January 5, 2007.

⁶Su Kim Chung, *Las Vegas Then and Now* (San Diego: Thunder Bay Press, 2002), 24.

⁷Eugene Moehring, *Resort City in the Sunbelt: Las Vegas, 1930-1970* (Reno: University of Nevada Press, 1989).

⁸A series of highly critical articles about Reno and Nevada in the influential *Christian Century* magazine in late 1931 contributed to the state's notoriety. See, for example, Paul Hutchinson, "Nevada—A Prostitute State," *Christian Century* 48, November 25, 1931, 1488-1490, and Paul Hutchinson, "Reno—A Wide-Open Town," *Christian Century* 48, December 2, 1931, 1519-1520.

⁹Larry Gragg, "Promoting Post-War Las Vegas: The Live Wire Fund, 1945-1950," *International Journal of Arts and Sciences* 3, no. 15 (2010): 10.

¹⁰Gragg, "Post-War Las Vegas," 12.

¹¹David G. Schwartz, "Erving Goffman's Las Vegas: From Jungle to Boardroom," *UNLV Gaming Research & Review Journal* 20, no. 1 (2016): 39-53.

¹²Nevada State Legislature. Assembly Bill 424: An Act authorizing certain counties to acquire, improve, extend, better, equip and furnish fairgrounds, exposition buildings, convention halls, other recreational buildings..., March 29, 1955, <https://www.leg.state.nv.us/Statutes/47th1955/Stats195504.html>.

¹³Bob Coffin, email to author, May 21, 2019.

¹⁴Cost-effective commercial and residential air-conditioning was essential for Las Vegas's success as a tourist and convention destination. The Apache (now Binion's) on Fremont Street was the first to air-condition its lobby in the late 1920s, and El Rancho (the first Strip resort) was the first to be completely air-conditioned when it opened in 1941. Providing a climate-controlled cocoon not only makes the city viable, it keeps visitors in economically productive spaces indoors.

¹⁵Al Freeman, "Recommendations: Las Vegas Convention Center Promotion" correspondence and brochure, February 6, 1958, in Sands Hotel Collection, Special Collections & Archives, University Libraries, University of Nevada, Las Vegas, <https://d.library.unlv.edu/digital/collection/ent/id/45476>.

¹⁶Freeman "Recommendations," <https://d.library.unlv.edu/digital/collection/ent/id/45478>.

¹⁷Tom Parkinson, "Arenas & Auditoriums: Las Vegas Convention Hall in Limelight for Opening," *Billboard*, April 6, 1959, 103.

¹⁸Senator McCarran sponsored the Civil Aeronautics Act of 1938 and the Federal Airport Act of 1945, which provided funds for military and civilian airports throughout the U.S., including what would become Nellis Air Force Base and McCarran Field (now the gateway airport to Las Vegas).

¹⁹U.S. Air Force News Review 43, produced by the U.S. Air Force air photographic and charting service, 1959.

²⁰Daniel Bubb, *Landing in Las Vegas: Commercial Aviation and the Making of a Tourist City* (Reno: University of Nevada Press, 2017), 61.

²¹Freeman, "Recommendations," <https://d.library.unlv.edu/digital/collection/ent/id/45489>.

²²Eugene Moehring, *Reno, Las Vegas, and the Strip: A Tale of Three Cities* (Reno: University of Nevada Press, 2014).

²³Letter from G. Marvin Shutt to Robert K. Ermatinger of the Laundry & Cleaners Allied Trades Association and copied to Las Vegas Convention Bureau, dated August 1, 1968. In Las Vegas Convention and Visitors Authority Visitor Information Pub. (LVCVA VIP) file. Special Collections & Archives, University Libraries, University of Nevada, Las Vegas. Las Vegas, Nevada.

²⁴Letter from Ben B. Wallis to Len Hornsby, sales manager, Las Vegas Convention Bureau, dated August 5, 1971. In Las Vegas Convention and Visitors Authority Visitor Information Pub. (LVCVA VIP) file. Special Collections & Archives, University Libraries, University of Nevada, Las Vegas. Las Vegas, Nevada.

²⁵Gragg, "Post-War Las Vegas," 5.

²⁶Mona Reno, *Population of Nevada and her Counties 1860-2000* (Carson City, NV: Nevada State Library, 2002).

²⁷Daniel P. Dern, "Jerry Pournelle talks of Comdex Past," *Inquirer*, July 5, 2004, <https://www.theinquirer.net/inquirer/news/1024518/jerry-pournelle-talks-comdex-past>.

²⁸H. Schwartz, "Cultivation of the Las Vegas Conventioneer as a Potential Player." Paper presented at the Sixth National Conference on Gambling and Risk Taking, December 9-12, 1984, Atlantic City, New Jersey.

²⁹Joseph Nelson Christensen, "Analysis of Casino Table Game Tipping by Comdex Conventioneers" (master's thesis, University of Nevada, Las Vegas, 2001).

³⁰Ben Dyer, interview by Nathan Ensmenger, Charles Babbage Institute, University of Minnesota, Minneapolis, May 7, 2004, Oral History 382, <https://conservancy.umn.edu/handle/11299/107274>.

³¹Jonathan Sachs, interview by Martin Campbell-Kelly, Charles Babbage Institute, University of Minnesota, Minneapolis, May 7, 2004, Oral History 388, <https://conservancy.umn.edu/handle/11299/107619>.

³²Jeannette Green-Davies, "Shriners play final rotunda date in rain," *Las Vegas Review-Journal*, September 22, 1990, 1A.

³³Review-Journal staff, "Rotunda dismantling begins," *Las Vegas Review-Journal*, February 13, 1991, 1B.

³⁴Gary Rivlin, "When 3rd Place on the Rich List Just Isn't Enough," *New York Times*, January 17, 2008, C1.

³⁵Tina Wentz, interview by author, Henderson, NV, January 7, 2007.

³⁶Wentz, interview.

³⁷Wentz, interview.

³⁸This is approximately the scale of the Philips house mentioned earlier.

³⁹Wentz, interview.

⁴⁰Las Vegas Convention and Visitors Authority, "2006 Las Vegas Year End Summary," 2006.

⁴¹Wilcox, interview.

⁴²Wilcox, interview.

⁴³Interview with Stephen Wolfert by author, Las Vegas, NV, January 9, 2007.

⁴⁴In addition to the anniversary themes—the 50th anniversary was celebrated in 2017—CES also releases historical photos to media as an annual news peg. Laura June and David Pierce, "Incredible photos from the CES vault: 1967 to 2014," *Verge*, January 4, 2013 [updated January 3, 2015], <https://www.theverge.com/2013/1/4/3828848/ces-photo-history>.

⁴⁵Erika Engstrom, "Selling with Sex in Sin City," *Journal of Promotion Management* 13, no. 1/2 (2007): 169-188.

⁴⁶The complex and shifting intersection of marketing, gender and sexuality, "sin," technology, and Las Vegas is a rich topic beyond the scope of this paper. For a discussion of media, technology innovation, and links to conventions such as the Adult Entertainment Expo (which, unofficially, ran parallel with CES for many years), see Jonathan Coopersmith, "Does Your Mother Know What You Really Do? The Changing Nature and Image of Computer-Based Pornography," *History and Technology* 22, no. 1 (2006): 1-25, and Crystal A. Jackson, D. Sahl, and Barbara G. Brents, "Porn fans as sex tourists? Broadening meanings of sexual consumption among adult entertainment expo attendees in Las Vegas, Nevada," *Porn Studies* 5, no. 3 (2018): 241-256. For technology design and gambling, see Natasha Schull, "Digital Gambling: The Coincidence of Desire and Design," *The Annals of the American Academy of Political and Social Science* 597, no. 1 (2005): 65-81. For the use of sexual promotional strategies at technology trade shows, see Li Cornfeld, "Babes in tech land: Expo labor as capitalist technology's erotic body," *Feminist Media Studies* 18, no. 2 (2018): 205-220. For the commerce of sex and tourism in Las Vegas, see Barbara G. Brents, Crystal A. Jackson, and Kathryn Hausbeck, *The State of Sex: Tourism, Sex and Sin in the New American Heartland* (New York: Routledge, 2009).

⁴⁷Wilcox, interview.

⁴⁸Brad Stone and Damon Darlin, "Companies Pay Dearly for Tech Trade Show," *New York Times*, January 6, 2007, A1, <https://www.nytimes.com/2007/01/06/technology/06electronics.html>.

⁴⁹Las Vegas Convention and Visitors Authority, "Las Vegas Historic Tourism Statistics (1970-2018)," February 2019, https://assets.simpleviewcms.com/simpleview/image/upload/v1/clients/lasvegas/Historical_1970_to_2018_4100bf49-5aba-4686-81bc-49cf15a2b411.pdf.

⁵⁰Candance Yang, "Q1 a Downer: First-quarter report finds exhibitors are exiting the showfloor," *Tradeshow Week*, May 25, 2009, <https://web.archive.org/web/20090525104302/http://www.tradeshowweek.com/article/CA6659644.html>.

⁵¹*New York Times* staff, "iPhone Pros and Cons," *New York Times*, January 10, 2007, <https://bits.blogs.nytimes.com/2007/01/10/iphone-pros-and-cons/>.

⁵²Brian Lam, "Confessions: The Meanest Thing Gizmodo Did at CES," *Gizmodo*, January 10, 2008, <http://gizmodo.com/343348/confessions-the-meanest-thing-gizmodo-did-at-ces>.

⁵³Kurt Badenhausen, "The World's Most Valuable Brands 2019: Apple On Top At \$206 Billion," *Forbes*, May 22, 2019, <https://www.forbes.com/sites/kurtbadenhausen/2019/05/22/the-worlds-most-valuable-brands-2019-apple-on-top-at-206-billion>.

⁵⁴Wilcox, interview.

⁵⁵Paul Goldberger, "Unconventional," *New Yorker*, July 31, 2006, 82.