THE POWER OF PLASTIC

EVENT CREDENTIALING TECHNOLOGY FOR REVENUE AND SECURITY ENHANCEMENTS

By Jeanette Johnson
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Who knew a piece of plastic could pack such a punch? Today's event credentialing systems have come a long way from the perforated tickets of yesteryear.

Event credentialing can run the gamut from generic badges and wristbands to sophisticated technical documents to aid in event management. The more sophisticated the credentialing system, the more an organization can benefit from data collection. Credentialing can be used not only to manage event attendance in near real-time, but it can serve as a security feature and also positively impact an event's return on investment.

"I've been managing collegiate and professional sporting events for more than 30 years, and I've been amazed at what we're now able to do with credentialing technology," said Jerry Anderson, Populous senior principal who manages events ranging from the NCAA Final Four to the Super Bowl and the FIFA World Cup. "We've gone from simple paper ticketing to the ability to track event attendees, which greatly benefits not only the event security staff but it also has significant financial implications as well."

Because they are custom printed, the physical design of credentials can vary depending on the venue, the client or the event — or they could even include sponsor information when appropriate, creating another revenue-generating opportunity for the event. Credentials also can be designed as long-lasting souvenirs or with green features made from recycled plastics and printed with non-toxic inks. Demographic information listed on the exterior of credentials (such as title, company, institution, etc.) is matched with the chip inside the card, and that information is linked to a database to help track attendance and aid in security. Anything from trade show attendance, to length of stay at the event, or attendance at key access points such as exhibitor booths can be tracked.

TECHNOLOGY 101: RFID AT THE HEART OF MODERN CREDENTIALING

The standard credential technology is based on RFID, the next-generation technology developed to accommodate barcode technology's shortfalls. Embedded into plastic credentials, standard RFID chips operate globally in most markets, including the Americas, Europe, Asia and Africa. Each RFID chip contains 800 bits of memory, including technology to provide authentication services and to protect against counterfeiting. Barcode technology is relatively cheaper than RFID technology; however, RFID offers speed, range and durability that barcode technology doesn't offer. Credentialing using RFID technology also takes a fraction of the time — as much as 75 percent less — to scan, thus saving costs on event personnel and allowing for faster entry into the event.

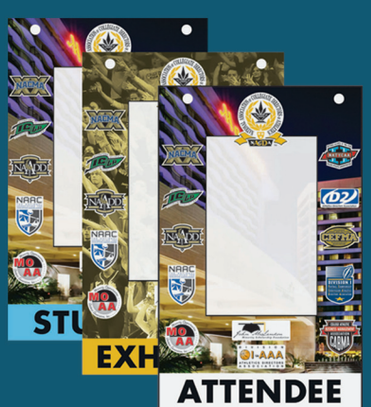
RFID technology provides much greater benefits over barcode technology, including:

- **Increased read rate:** RFID can read more than 100 cards simultaneously, while barcodes can only be scanned manually, one at a time.
- **Enhanced line of sight:** RFID readers can be oriented in any direction within the read range, whereas barcode scanners must physically view each credential directly to scan.
- **Decreased manual labor:** Once the RFID system is running, it is completely automated; barcode technology requires staff on hand to scan each credential.
- **Advanced manipulation:** RFID technology allows event managers to read, write, modify and update credentials near instantaneously. Barcode technology only provides the ability to read information.
- **Increased durability:** RFID chips are embedded into credentials and can be read through even the harshest of climates. Barcodes can become illegible in inclement weather.
- **Enhanced security:** Each RFID-based credential contains a unique RFID number that cannot be replicated. Data can be encrypted and password protected; it can also be loaded with a 'kill' feature to permanently remove data embedded in the chip, so stored information is much more secure than barcode technology, which can easily be reproduced or counterfeited.

- **Triggering events:** RFID technology can be used to trigger certain events, such as setting off an alarm when a no-access door is opened. Barcode technology does not have this sophisticated capability.

SELECTION PROCESS: MATCHING THE CREDENTIALING TO THE EVENT

Custom credentials are ideal for corporate and institutional applications requiring tight security, but they can also be used for secure ticketing at sporting and entertainment events. Credentialing choices are vast, and technology varies for each event in which it is used. Event organizers can create custom plastic credentials, from determining the specific card formulation to identifying security features. The scale and location of the event and the kind of data to be captured will help event managers determine the depth and breadth of technology required. The benefit of technology enhanced credentialing is its ability for customization. A customized credentialing system will help define specific tracking and reporting needs and the hardware and software needed to accommodate the system.



CREDENTIALING IN ACTION: THE 2010 NACDA ANNUAL CONVENTION

Populous provided credentials for all 3,000 attendees, guests and exhibitors at the 2010 NACDA Convention in Anaheim in June 2010. In addition to creating a more efficient registration process, NACDA's goal in implementing credentialing technology was to better track attendance at the Convention exhibit hall.

All attendees registered for the Convention using a web-based, centralized registration system to create a smoother registration process. This also allowed NACDA to more thoroughly control the information they gathered from attendees. Populous designed the Convention credential based on design elements provided by NACDA. Populous also incorporated the appropriate coding to be included in the embedded RFID chips, including any credentials that were manufactured on-site with walk-up registrations.

An RFID reader system was placed at the entrance to the trade show floor, and antennas to track movement were placed both inside and outside the doors to track traffic entering and leaving the trade show over a two-day, seven-hour period. This also allowed the team to track how long attendees stayed on the trade show floor.

Populous provided NACDA with a range of statistics to aid in planning, marketing and operating future events. Tracking data showed that:

- Nearly 2/3 of opening night trade show attendees were inside the exhibit hall floor by 4:30 p.m.
- On opening night, peak population on the trade show floor was at 5:30 p.m.
- More than 70 percent of all attendees visited the trade show at least once throughout the course of the Convention, an important number NACDA can use to recruit potential exhibit hall vendors for future shows.
- The tracking software was also able to help determine that most attendees consumed one drink per hour on average — an important statistic that could be beneficial in future planning for food and beverage costs.

Future expansion of the tracking system at the Convention will move toward tracking attendance at meeting rooms to gauge popularity of specific sessions to aid in future education session planning. Technology will also be able to track lead retrieval at individual exhibit hall booths by creating vendor-based RFID stations, where vendors could download information about booth visitors and create a custom e-mail follow up in real time.

IMPLICATIONS FOR THE FUTURE

In addition to using credentialing technology for events such as NACDA's Convention, many collegiate athletics events are looking to the technology for event security. Beyond sports, credentialing technology has broad implications for university campuses. More colleges and universities are installing RFID technology to track students, staff and property. RFID cards can also be used as debit cards, replacing traditional payment methods. Credentialing technology has the ultimate power of creating secure sporting events and even entire university campuses.

About the author:

Jeanette Johnson is a member of the global event management team at Populous, a team that manages every facet of events, including feasibility studies, overlay planning, bid development and writing, event hospitality accessibility services and operations management for events ranging from the NCAA Final Four to the FIFA World Cup. Jeanette specializes in event credentialing, and she has provided services for such events as the Sugar Bowl, NCAA Women's Final Four, the Super Bowl and the NHL Stanley Cup.

Populous is a NACDA corporate sponsor.