

The first in a series of white papers that provide extensive technical and marketing advice on a variety of Barcode solution topics.

# Choosing the Right Barcode Attendance Tracking System

Attendance tracking at conferences, seminars and trade shows can be a complex, overwhelming task for staff and managers. If done manually, the process can be laborious and fraught with errors. Automated systems are now available to ease this process, however, they can be complex and expensive. Barcoding, an automated identification technology, stands out as a simple and economical solution. The use of barcoded badges to identify attendees and barcode scanners to capture the data makes accurate attendance tracking feasible and reliable for any organization.

## Define Your Needs

To effectively choose an automated tracking system, you first need to define your needs. For example, how many people do you expect will attend your event? In most cases, if you are anticipating attendance of at least 100 people, an automated system will make sense economically. Secondly, do you need to track attendance at events with breakout sessions, training or classes at your conference? Using a barcode attendance system, allows you to speed up the tracking process, increase accuracy and verify an attendee. You can even certify the amount of time an individual spends in a session, if needed. Because the attendance system is automated you will ultimately save time and money.

## Registration

In evaluating an attendance tracking system, a key factor to consider is registration. In many systems, registration is done off-line and has to be incorporated or imported into the attendance tracking system. If the registration is included as a part of the attendance system then this will free up a lot of time that would normally need to be done manually. In many cases, the registration will allow attendees to self-register for the conference and provide them with a barcoded confirmation. This confirmation can be brought with the attendee to the conference so that the check-in procedure is more automated and saves time.

## Barcoded Badges

It is critical that the barcoded badge be created with a barcode that can be easily scanned. The barcode in most cases, needs to be a black barcode on a white background because this creates the best contrast and is easier for the barcode scanner to decode. Also, the barcode needs to be created so that it is within the specifications of that barcode symbology. So, whether you are using one-dimensional or two-dimensional barcodes make sure that you use a reputable software for creating the barcoded badges. To save time, the attendance tracking system will have this feature built-in to their software so that you can very easily print a badge during registration. Common barcode symbologies that seem to work best for badges are Code 128, Code 39 and DataMatrix or QR Code.

*(continued)*



### DEFINE YOUR NEEDS

1. How many attendees will I have?
2. Do I need to track in and out time?
3. Do I need a record of absentees for my sessions?
4. Will a self-check-in system work or do I need the staff to scan the badges?



### REGISTRATION

1. On-line registration helps automate the process
2. Automation means less staff thus less cost
3. Fast Check-ins can be obtained by using barcoded registration

## Barcode Scanners

There are many types of barcode scanners that can be used for scanning badges. The type that works best for tracking individuals into sessions is the type that has memory to store the data. Also, you will want to input the session# they are attending to begin with so that the attendee records are matched to the session. The procedure is to usually enter the session# then scan all the badges as they come through the door. An individual record is created for each badge holder that contains the session#, badge#, date and time of the scan. In cases where you need to know how long they attended a session (for continuing credit purposes), then you will also scan people "IN" or "OUT". After each session, the people scanning badges will move to the next session and repeat the process. At the end of the day or at the end of the event, then all the barcode scanners are downloaded and the data is transferred into the attendance tracking software so that reports or queries can be obtained.

The number of barcode scanners required for any conference can vary, but the rule of thumb is 1 barcode scanner per 50 people. So, if 150 people are coming to one session then it would be good to have 3 barcode scanners at the door so people can get in and seated without much of a wait. If you had 5 concurrent session with 150 per session then you'd want 15 barcode scanners (5 x 3).

Organizations who put on only one of these conferences per year would do well to rent the scanners rather than buy them since the rental price is usually far less than buying (\$100 rental price vs \$500 or more buying price). On the other hand, if your organization does a lot of conferences or shows throughout the year then it would probably make more sense to buy the scanners. They will pay for themselves soon enough.

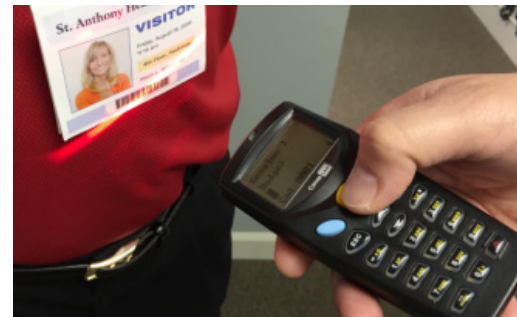
Manpower is always a consideration in these things and the more barcode scanners you have the more personnel you will need to use them. So, this is a good thing to keep in mind when deciding how many to get. Even though the process is fairly simple in using the barcode scanner, it is something that should be worked into a training schedule with whomever is going to be a badge-checker. Volunteers and first-time users will need to be educated properly in order to obtain good results.

Also, one last thing to remember is that internet access is usually not required and is not recommended for barcode scanners. WiFi has a habit of losing connections or getting clogged due to traffic. It is better to capture the data on the device and then upload later since the reports are not needed until after the show anyway. The only time you may need the internet is if the database is in the "cloud" and you need to run your reports at the very end of the conference.

## Conclusion

From the beginning process of automating registration by providing barcoded badges and scanning these badges at the various stations, seminars and exhibitor booths, the barcode process proves to be an efficient and cost-effective way of tracking people. It has proven time and again that automated data collection can pay for itself quickly and provide an error-free operation. Barcoding provides a smooth and easy process for tracking attendance at conferences, seminars and trade-shows.

MSS Software is a primary developer of attendance tracking systems using barcode technology. From simple barcode scanning to cloud-based attendance tracking systems, MSS has continued to create innovative tracking software and systems. We rent and sell these systems to small and large corporations throughout the US and Canada.



### BARCODED BADGES

1. Use reliable software to create the barcoded badges
2. Make sure there is good contrast between the black bars and spaces
3. Use a system that creates badges on-site quickly



### BARCODE SCANNERS

1. Avoid WiFi or Bluetooth since they are fraught with problems
2. Use reliable barcode scanners that won't lose the data
3. Consider if IN time and OUT times are needed for calculating Total time attended?
4. Investigate renting the barcode scanners vs buying

Contact MSS Software  
at 800 428 8643