White Paper

EVENT ANALYTICS

DERIVING INSIGHTS FROM MULTIPLE DATA SOURCES

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Authored by:

Jeff Stanley
Executive Director of Strategic Research
Exhibit Surveys, Inc.

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Collecting, Analyzing and Using Data in the Events Industry

In the events industry, more data than ever before can be gathered and utilized to build your knowledge base about attendees, exhibitors and sponsors. But are you capturing the right information? And are you comfortable with your organization’s ability to measure, analyze and interpret the diverse data streams available? Are you making discoveries and turning them into the kinds of insights that will yield the maximum benefit for your event?

“Big Data” and Trade Shows/Events

Over the past few years a new term has appeared – “Big Data.” But there is a lot of misinformation about what “Big Data” really is. Many times it is being very loosely and opportunistically defined. In fact it is being pushed by some as the magic wand that will cure all your data issues. Our position at Exhibit Surveys is that working with data still remains a challenge, and “Big Data” in its true definition does not apply to all organizations or industries. Because of the increase in computing power over the past decade, there has come to be data sets that can be characterized in three ways.

First, there are data sets that now have tremendous volume. These data sets are made up of more than megabytes or millions of pieces of information or the billion pieces of information in gigabytes, but imagine petabytes or quadrillion pieces of information being collected. Second, these data sets have velocity meaning that the data is a continuous stream, being collected with frequent updates in real time. Third, these data sets have variety. They are made up of multiple data sources in multiple formats. They include data that is both structured like registration databases and surveys as well as unstructured such as the data produced in social media comments.

Examples of organizations that gather and possess data that have these three attributes are Google’s data centers, Amazon’s core shopping site and server farms, and the National Security Agency (NSA) with its building which cover various mountain-sides. There is so
much data that these organizations are collecting that you can picture the physics of data actually changing. Standard statistical necessities, such as number of respondents and structured data formats, are not that important. And one result of this means that the software tools and people skills needed to handle these “Big Data” sets are different than the tools and skills needed for standard analytic projects. “Big Data” projects need computer scientists and programmers, while analytic projects need those skilled in psychology, sociology and business intelligence who know how to use statistical and database tools.

**Data Sets Available to Events Today**

Our contention at Exhibit Surveys is that to a large extent, trade shows and other live-event environments lack the degree of data collection - specifically the volume and velocity - to be considered promising for what is generally thought of as “Big Data.” Even those larger media companies with broad portfolios of events that coincide with print and online platforms really do not have data sets that fulfill these three criteria.

However, while the event industry may not have true “Big Data” at its fingertips, what the event industry now has are more and better show-related data available than ever before – and, when understood, this data can improve decision making and uncover new opportunities.

Let’s review the changes in the traditional sources of event data that has happened over the last 15 to 20 years. To start with, the quality of registration data has improved tremendously over this time period. What was once somewhat haphazardly collected with paper forms and on-site data entry by temporary workers has transformed itself with online pre-registration and electronic verification at shows and now provides much more accurate records of event attendance and demographic profiles of attendees. Lead data
has similarly been transformed over this time period. What was once entirely done with credit card-style swipe machine creating paper slips that needed to be counted and entered manually by each exhibitor is now collected completely electronically and can be viewed on an event wide basis. Even research surveys around events have been transformed with on-line tools. Before the on-line data collection tools currently being used, surveys were collected on relatively small samples because of the high costs of postal mail or calling people on the phone. Today much larger samples can be contacted by email and the larger number of responses gathered allows much more in-depth analysis including looking at results by different audience segments.

**Event’s Internal Data Sources**

- Registration / Exhibitor Database
- Event Website
- Surveys (pre, onsite, post)
- Social Media (Twitter, LinkedIn, Facebook)
- Leads
- Mobile Apps
- Activity Tracking Resources (scanning, RFID, NFC, iBeacon, phone tracking)

In addition over the past decade new sources of data around events – mostly to do with usage of event services and features - have emerged. Of course every show now has a website that all its customers – both exhibitors and attendees – depend on for key information and all their activity can now be tracked. More recently, mobile apps and social media efforts have emerged as information sources with track-able information. And really just coming into its own are a variety of activity tracking tools for the actual event itself. RFID has been around for nearly a decade, though used, because of cost, by only a relatively small number of shows. Now tracking of mobile phones, plus near field
communications and iBeacon technologies promise to make activity tracking even easier for many more events.

**External Data Sources**

And these are just the internal data sources. There are now more external data sources that can be used to align or benchmark your show’s performance. U.S. Census and Department of Labor provides information that can define your show’s industry and the job functions of your attendees. Business databases from Dun & Bradstreet and Hoovers can be used to help define the potential universe of your attendees. Economic forecasting firms such as IHS and IBISWorld can define the market potential of the industry your show represents. Plus there is the “Holy Grail” of connecting with exhibitor’s CRM systems to track actual sales that might truly soon be a possibility. And let’s not forget the event industry’s own research from CEIR, in particular the Index which provides yearly figures for industry attendance, revenue, net square footage and number of exhibitors. And finally there are Exhibit Surveys’ benchmarks of trade show audience quality, audience activity and exhibit performance. These range from shows’ traffic density to attendees’ buying power to exhibit performance scores for attraction and efficiency. The incorporation of additional data into the analysis can yield a more accurate picture of the present - and a more effective prescription for the future.
EVENT DATA CURRENTLY RESIDES IN SILOS

Accessing and utilizing this data can pose some challenges:

- Much of the data collected today exists within functional silos, and if confined to these silos, its value to the organization as a whole is limited. For example, is the mobile app for your event connected to the registration database?
- The data quality can also vary, often depending upon how it was collected.
- Relying on one data source, taken in isolation, can lead to the wrong conclusions or provide an incomplete picture. Analyzing multiple data streams, or looking at them in new combinations, can remove noise and distortion, add dimension to situational understanding, and validate strategic decisions.

While the event industry may not be faced with true “Big Data,” you certainly have more data, which can be overwhelming. In the face of multiple data sources, metrics and data types, it’s important to keep it simple.

Start with the decisions you are trying to make, or the issues that are to be addressed, and then identify the full set of available information sources. By clearly defining the critical business issues at the outset, the data that is required to address these issues becomes more apparent.
What are your primary areas of concern?

- Is your attendance promotion effort reaching the right target markets? Is it reaching all of your potential target markets? Do your exhibitors agree with who you are targeting?
- Is your current show location optimal? Is it aligned with future market potential?
- What industries or geographies represent the best opportunities for growth?
- How can you help your exhibitors achieve an improved ROI? Does exhibitor dissatisfaction – or even exhibitor attrition – pose a problem?
- How do different segments of your attendee population value your educational program?
- Are certain aspects of attendee behavior predictive of future purchasing decisions? How can predictive behavior information enable sales for exhibitors?
- What do historical patterns and economic forecasts suggest about the future of your event?

Next begins the Data Analytics process, which includes inspecting, cleaning, transforming and modeling the data with the goals of discovering useful information, suggesting conclusions and supporting decision making.

What is more important than the volume of data? The quality of the data capture and the data analysis.
LINKING DATA CAN EXPONENTIALLY INCREASE ITS VALUE

While the trade show industry is not a real “Big Data” environment - the conventional laws of data physics still apply - we at Exhibit Surveys do feel that our industry is at the dawn of the age of event analytics. The most important consideration is that linking data sets can exponentially increase the value of your data. And while not all data sets can be connected all the time, even connecting some of your data sets some of the time can drive significant value.

RELIABLE DATA AND RELIABLE INTERPRETATION YIELD RELIABLE INSIGHTS

In Data Analytics, success often depends on the skills and experience of the analysts and researchers. Your challenge is to find a partner or an internal analyst that will treat your data sets with the proper amount of knowledge and skepticism to understand your data’s strengths and weaknesses. They need to know the right intelligence to gather, which data streams convey that information, and how to analyze it all from the perspective of an event organizer.
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Jeff Stanley
Executive Director of Strategic Research
Exhibit Surveys, Inc.
7 Hendrickson Ave., Red Bank, NJ 07701
Telephone: 732 741 3170
jeff@exhibitsurveys.com