Introduction

The issue of managing contractor EHS performance is an ongoing concern among organizations of all industries, typically because contractors may be performing non-routine work at sites that are not directly supervised by an EHS manager, or any manager at all. Much research has already been done to determine why safety can be negatively impacted through contractors and how much (or little) attention is paid to managing contractor safety. This research report focuses on the pre-qualification stage of managing contractors – why pre-qualification is important, how third-party pre-qualification companies add rigor to this step, and how the pre-qualifying process enables contractors to become better and safer overall.

This report summarizes the results of the National Safety Council research project on the efficacy of outsourced contractor management systems. More specifically, this research investigates if suppliers, contractors, and vendors realize improved safety performance as a result of their participation in these types of programs. The purpose of this study is to examine the actual safety benefit of implementing a third-party contractor management system and the safety effect on participating contractors.

This study was conducted using a contractor dataset provided by BROWZ, LLC which is now Avetta. The study findings do not represent the Avetta contractor database in its entirety.
**Research Goal**
Examine the safety benefits of a third-party contractor management system.

**Sample Data**
17,460 companies in BROWZ database from 2007-2015.

**Results**
BROWZ suppliers, contractors, and vendors significantly outperform national safety averages.

BROWZ contractors realize a greater improvement in TRR, DART, and LWR the longer they remain registered with BROWZ.
Outsourced Contractor Management

The BROWZ process of contractor qualification starts with contractors submitting their data and completing an online questionnaire. BROWZ then verifies and scores compliance data and monitors the changes in these data points over time. Gaps or deficiencies in recordkeeping, communication, work organization, training, safety culture, standards enforcement, etc. are identified by BROWZ to assist contractors in understanding how to become safer and more qualified.

Additional components considered beneficial in a contractor management solution include a focus on leading indicators such as safety programs and cultural adherence within supply chain organizations, as well as positive reinforcement for meeting and exceeding safety standards. In this case, positive reinforcement is provided in the form of scorecarding and customer reinforcement, hiring those contractors who meet compliance standards.

Ultimately, client organizations hiring contractors will utilize the BROWZ compliance status and scorecarding as a factor in issuing future work opportunities. These client organizations have made a commitment to work with contractors who have a demonstrated commitment to EHS performance.

Data Analysis

The data analysis was performed independently by the National Safety Council (NSC), utilizing data provided by BROWZ, LLC (www.browz.com). The BROWZ Contractor Dataset contains 17,460 contractor companies that have joined BROWZ between 2007 and 2015 (this is a partial data set and does not include all contractor companies being managed by BROWZ). All data was anonymized with company names removed from the dataset and only a unique alphanumeric ID was used as an identifying piece of information. Primary NAICS industry codes were assigned to each contractor, ranging from three to six digits.

Two types of analyses of the data were performed, one where contractors were grouped by industry code and another where the entire dataset was analyzed as a whole. A copy of the academic paper is available at nsc.org/contractormanagement.
# Hypothesis

A summary of the full report and the results follow.

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<thead>
<tr>
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<th>Hypothesis</th>
<th>Findings</th>
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<td>1</td>
<td>BROWZ contractors in any two-digit industry code will have a better average TRR, DART, and LWR* than the industry as a whole.</td>
<td>Supported: The results of the disaggregated analysis show that BROWZ contractors have better TRR, DART, and LWR than industry average for every two-digit industry code analyzed and for nearly every year.</td>
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<td>2</td>
<td>The BLS population in any two-digit industry code will have a stronger annual rate of improvement in TRR, DART, and LWR than BROWZ contractors in the same two digit industry code.</td>
<td>Not Supported: 54% of the time, BROWZ contractors had a stronger annual rate of improvement for TRR, DART, and LWR as compared to the BLS.</td>
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<td>3</td>
<td>BROWZ contractors will have better average TRR, DART, and LWR than cross-industry averages.</td>
<td>Supported: In every year and on every statistic, the BROWZ contractor universe had a better lagging rate than the cross-industry average as reported in the BLS.</td>
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<td>4</td>
<td>BROWZ contractors will not see greater improvement in TRR, DART, and LWR the more years they have been part of the BROWZ universe as compared to the BLS.</td>
<td>Not supported: While the results of Hypothesis 4 were mixed, there were many years where the BROWZ rate of improvement on TRR, DART, and LWR did exceed the rate of improvement of industry as a whole. In fact, the rate of BROWZ improvement was greatest for those companies that joined BROWZ earlier. This suggests that BROWZ helps its contractors to continually improve on their rates over time without seeing stagnation.</td>
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<td>5</td>
<td>BROWZ contractors in Group A (BROWZ contractors outperforming industry) will have a smaller annual rate of improvement in TRR, DART, and LWR than BROWZ contractors in Group B (BROWZ contractors underperforming industry).</td>
<td>Not supported: In some cases, and between some years, Group B has a better rate of improvement than Group A. In most cases, however, Group A has a better annual rate of improvement than Group B. Smaller organizations are more prone to variability in their safety performance rates, and therefore may not see a steady improvement in rates to the same degree as larger organizations that are performing better than cross-industry average.</td>
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*TRR – Total Recordable Rate  
DART – Days Away, Restricted, Transferred Rate  
LWR – Lost Workday Rate  

Download the full report at nsc.org/contractormanagement
The results indicate that registered BROWZ contractors, and vendors significantly outperform national safety averages. BROWZ contractors have a TRR, DART, and LWR that is 33.7 percent, 47.7 percent, and 65.0 percent better (respectively) than the national intra-industry averages. This is true both within individual industries and all industries as a whole.

These same contractors within the BROWZ universe who already outperform industry averages in key metrics continue to improve at or better than the industry averages. BROWZ contractors who joined in 2007 saw an average 56.58 percent improvement in TRR between 2007 and 2015. The BLS reported an average 40.93 percent improvement in TRR between these same years. This indicates that BROWZ contractors experienced an improvement in TRR of almost 16 percent above what all companies experienced between 2007 and 2015.

Finally, analysis indicates that there is a strong likelihood that those BROWZ contractors who were already performing better than the cross-industry average will have a higher annual rate of improvement than those performing worse across industry averages.

Because of the reputation of BROWZ’s services, we expect that BROWZ naturally attracts higher performing contractors. It was anticipated that on an annual basis, BROWZ contractors may find it more challenging to exceed industry improvement rates, as continually improving on smaller rates becomes increasingly difficult. It was found, however, that the rate of BROWZ improvement was greatest for those companies that joined BROWZ earlier. This suggests that BROWZ helps its contractors to continually improve on their rates over time without seeing stagnation.

While it is a rigorous and often drawn-out process, there are many benefits to the pre-qualification process that go beyond mere assurance of occupational safety. In terms of relationships and communication, pre-qualification was found as an opportunity to develop solid relationships between owners and contractors and encourage contractors to modify their behavior in light of a long-term view of the contracting relationship (Baroudi & Metcalfe, 2011). Additionally, because pre-qualification forces contractors to scrutinize their practices and systems, it appears that pre-qualification provides opportunities for continuous improvement (Ibid., 2011).
BROWZ’s execution of its services demonstrates not only that thorough contractor pre-qualification and safety management systems are important, but also effective. With better safety performance within and across industry, and greater improvement in safety performance over time, the contractors within the BROWZ database are a testament to the BROWZ process and raising the standard of industry as a whole. The use of third-party contractor management systems can be considered a best practice for all companies using contractor services.

For more information about BROWZ qualification process please visit www.browz.com

BROWZ Contractors outperform national safety averages.

- **33.7% Reduction** in TRR compared to BLS
- **47.7% Reduction** in DART compared to BLS
- **65% Reduction** in LWR compared to BLS
- **16% Greater** improvement in TRR compared to BLS over 8 year period