

# CSIA-Certified Companies

**PROVEN BETTER  
PERFORMANCE**



**csia**

control system integrators association

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## Executive Summary

Based on data collected and analyzed during the summer of 2016 comparing the key performance indicators (KPIs) of independent system integrator (SI) companies, CSIA-Certified SI companies in the U.S. show a higher median revenue growth rate compared to that of leading U.S. automation equipment suppliers. In addition, comparing KPIs linked to SI company performance, a sample of global CSIA SI members showed a significant difference in company performance between Certified and non-Certified SIs. This link between better company performance and growth should provide an incentive for SI companies to implement CSIA Best Practices with the end goal of gaining Certification. Improvement is inevitably reflected through a stronger company. Our expectation is that CSIA Certification will eventually become a mark of excellence recognized industry-wide and demanded by client end-users during project bidding processes, although there is no reason to wait to get started. The true benefit of Certification is becoming a better business.

For your company's success, you need CSIA Certification now.

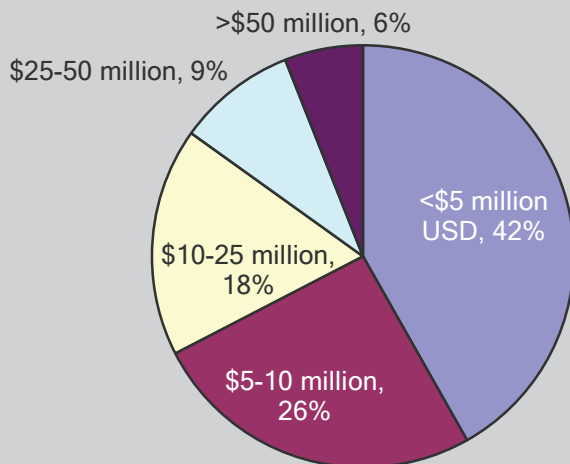
**“ We put considerable effort into reorganizing our company to follow CSIA Best Practices. This journey started when we joined CSIA. We saw immediate improvements in our processes. Our company is now very different from what it used to be. Gaining the certification was not an easy task, but it was worth it! Certification was an important milestone, not the end destination. Best Practices can deliver continuous business improvement – there are no limits. ~Luigi De Barnardini, Autoware**

## SI Industry Demographics

### Distribution of SI companies (mainly U.S.) by company size

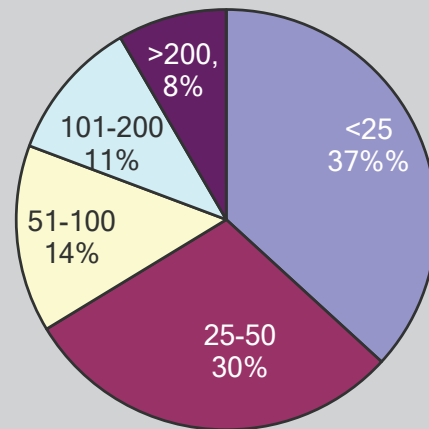
SI companies vary significantly in size. Most tend to be smaller: 42% have yearly revenues below \$5M and 37% have fewer than 25 employees. 68% have yearly revenues below \$10M and 67% have less than 50 employees. On the upper range of the spectrum are large, global, multimillion dollar revenue enterprises.

**Annual revenue for control system integration work**



NOTE: Includes shop/panel assembly; excludes construction

**Average number of employees plus contract people involved in system integration**



NOTE: Includes technical staff, support staff (HR, finance, etc.) and those doing shop/panel assembly; excludes construction personnel

Data Source: Spring 2017 CSIA - JP Morgan survey (285 respondents)

## Introduction

The industrial control system integration market is very diverse. The companies delivering system integration cover a wide range of industry vertical markets (e.g. food and beverage) and applications within these verticals (e.g. packaging). SIs need to be proficient, not only with the automation products and platforms they service, but also with the industry vertical applications.

There are, broadly, three groups that typically perform system integration work:

1. Independent SIs (companies that are independent from the automation equipment suppliers).
2. System integration groups that include automation equipment suppliers, machine builders or providers of other services (e.g. refrigeration or secured power).
3. Internal system integration teams at industrial plants (also referred to as end users).

Over the years, this last group has looked to third parties to outsource their system integration work and focus on the areas they view as core parts of their processes.

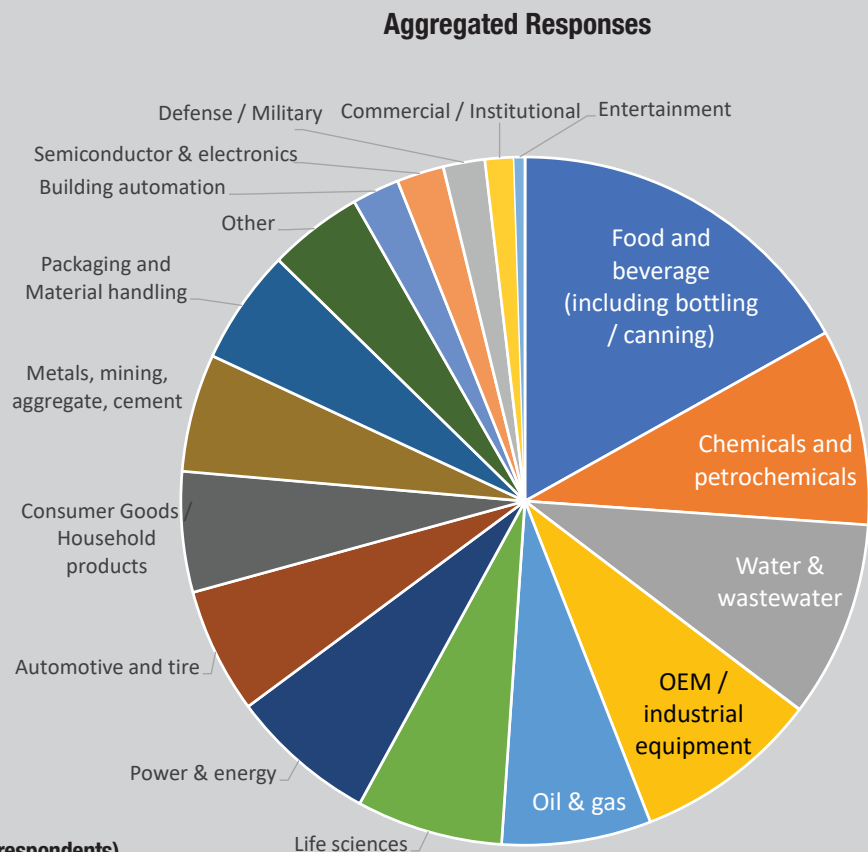
This white paper document focuses exclusively on the first group, independent system integrators.

### Broad participation by System Integrators in industry verticals and applications

Industry/vertical applications	Response %
Food and beverage (including bottling / canning)	48.1%
Chemicals and petrochemicals	26.3%
Water & wastewater	26.3%
OEM / industrial equipment	24.9%
Oil & gas	20.0%
Life sciences	19.6%
Power & energy	19.6%
Automotive and tire	16.8%
Consumer Goods / Household products	16.1%
Metals, mining, aggregate, cement	15.8%
Packaging and Material handling	15.4%
Other	12.6%
Building automation	6.3%
Semiconductor & electronics	6.3%
Defense / Military	5.6%
Commercial / Institutional	3.9%
Entertainment	1.4%

NOTE: Not mutually exclusive categories.

Source: Spring 2017 CSIA - JP Morgan survey (285 respondents)



## CSIA Best Practices

While technological proficiency is a must-have requirement, the fate of SI companies is determined by their ability to create successful enterprises. In other words, SIs need to not only be good with the automation technology they implement, they also need to create healthy, profitable and resilient companies.

CSIA was founded in 1994 when a small group of SIs came together with the goal of helping each other build solid companies. The areas that were quickly identified as needing the most support related to business management. This effort led to the creation of the CSIA Best Practices (BP) and Benchmarking manual, a comprehensive quality management system for SI companies. The BPs remain the core of the association and are what drives its activities, including the annual Executive Conference, educational webinars, insurance and legal programs.

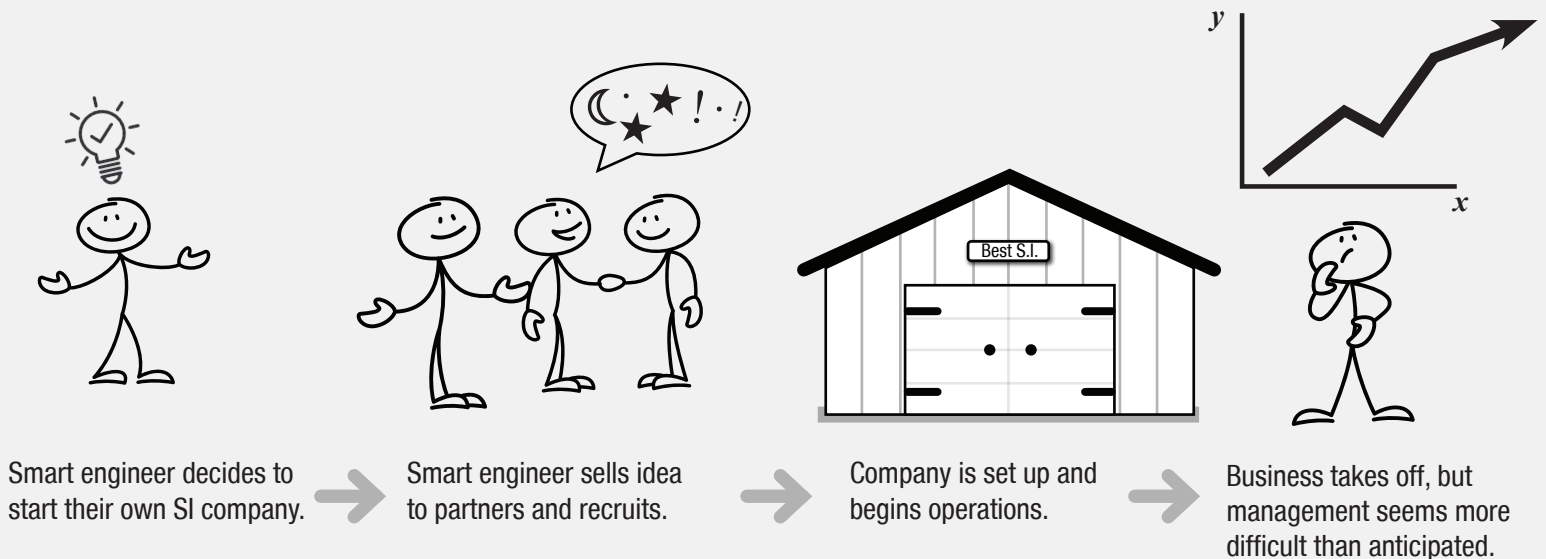
Those SIs that implement the BPs in their companies have the option to request an audit by a third-party auditor. If they pass, they receive the designation of CSIA-Certified for three years, at which time they must pass another audit to maintain Certification. Attaining Certification is a rigorous process requiring a significant investment in time and resources.

The BPs get reviewed periodically, normally every three years. The current revision version is 4.0, with 5.0 in pilot mode, soon to be fully released. Of the more than 400 SI company members of CSIA, over 90 are CSIA-Certified, and those numbers are growing.

Over the years, there has been no shortage of testimonials from satisfied SIs who have implemented the BPs and seen their company gain a higher level of professional success. There has also been a long-standing interest in quantifying this impact, something we set out to do in Summer 2016. The results of that analysis are summarized in this white paper.

## Independent System Integrators Share a Common Path

Many SI companies share a common starting point: entrepreneurial founders with a passion for automation want to be their own boss and set up their own companies. Many start as independent SI contractors, who then work hard to grow respectable companies.



# Business Case for CSIA Certification

CSIA focuses on the following three strategic objectives:

1. Help system integrators be more professional.
2. Be a forum for all members to network, train, discuss common issues and share best practices.
3. Influence the marketplace so that CSIA Certification becomes commonly accepted by end-user clients.

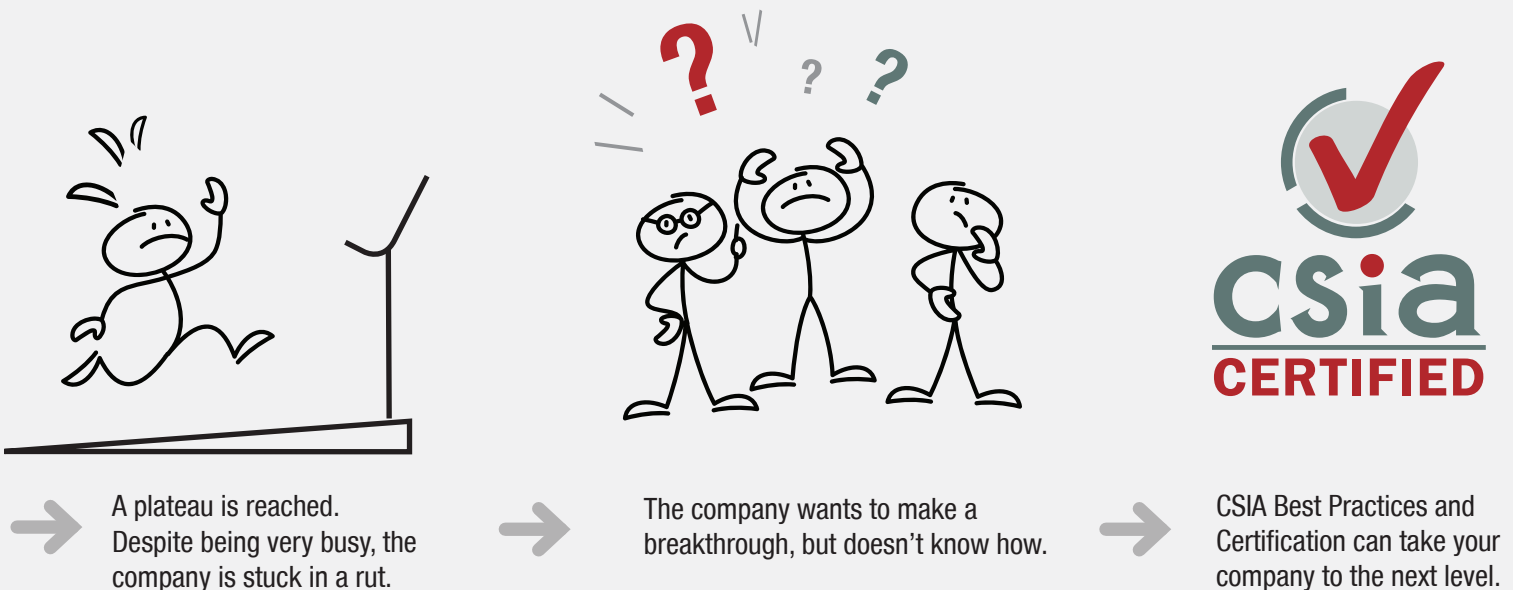
From member feedback, CSIA knows it is delivering well on objectives one and two. However, additional efforts are needed on the third. It is true that CSIA needs to be better recognized outside of the automation industry, particularly with end-user clients. Aggressive efforts are currently under way, including those that leverage CSIA's digital presence, such as the CSIA website ([controlsyst.org](http://controlsyst.org)), CSIA's Industrial Automation Exchange ([csiaexchange.com](http://csiaexchange.com)) and social media presence, along with strong collaboration with technical media and industry partner companies.

However, for SIs to delay seeking CSIA Certification because end-user clients don't yet demand it is a mistake. Based on the quantitative analysis shown in this paper, SIs stand to benefit from CSIA Certification, independent of market recognition.

**“ Over the last 16 years I have led our company through five Certification audits. For us, the big benefit comes in the application of the Best Practices in our systems. Our company has been able to sustain 15% revenue growth year after year and it continues to deliver successful projects month in and month out. I can honestly say that without the implementation of CSIA Best Practices into our systems, we wouldn't have been so lucky! The Certification process is really the icing on the cake for us; allowing us to verify through a third party that our teams are really doing what we say we do.**

*~Jeff Miller, Interstates Control Systems*

The ongoing challenge is growth in an environment where everyone is busy getting the work done.





## Data Linking CSIA Best Practices to SI Company Performance

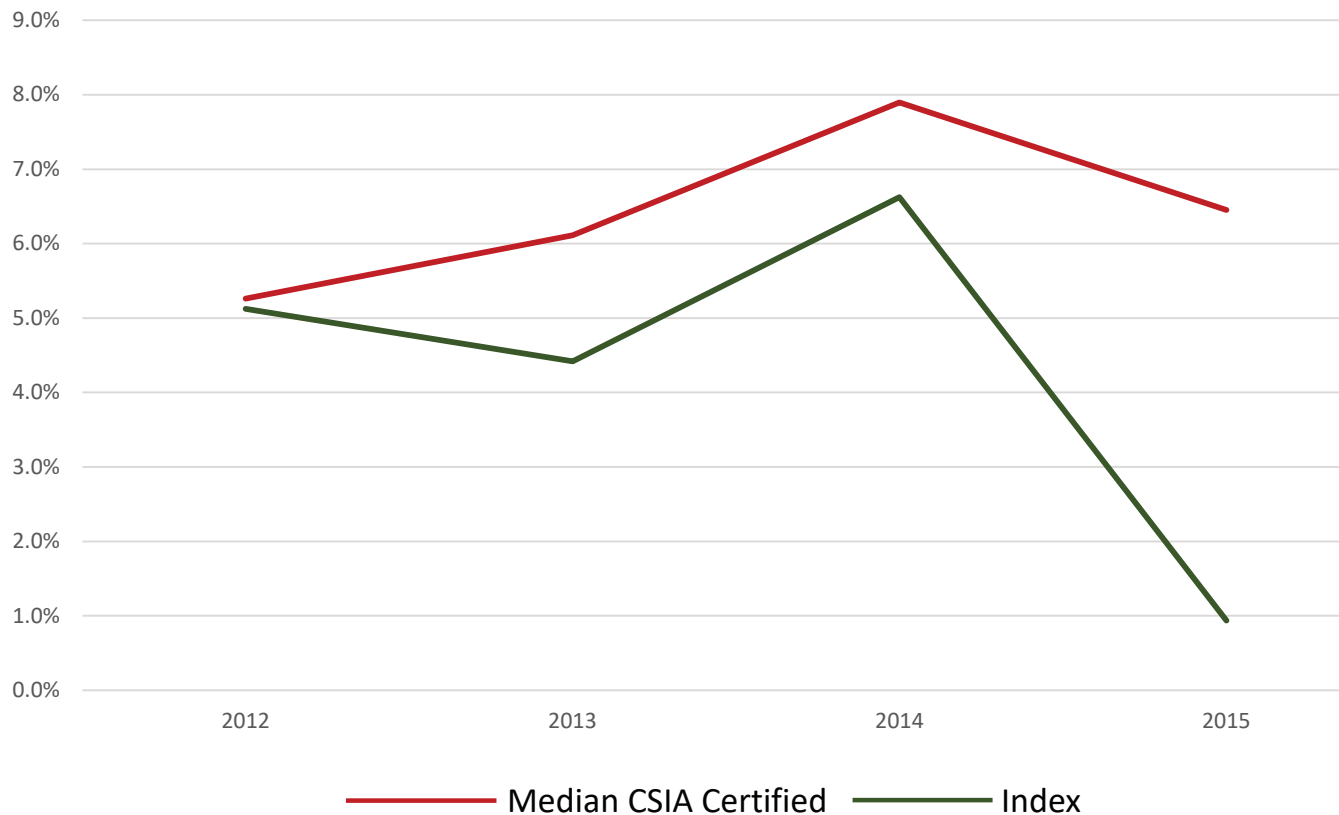
### Revenue growth:

Profitable growth determines the value of any enterprise. There are, of course, fluctuating underlying economic factors that impact business and are outside the control of the SI. While there is no way to determine if the growth was profitable, a sample of 58 CSIA-Certified companies showed a median annual growth rate of between 5% and 8% from 2012 to 2015. The results were benchmarked against a relevant index (see notes below). CSIA doesn't regularly collect information on the revenue of non-Certified SI members. Admittedly, that would have allowed a more direct comparison.

What this comparison showed is that the median of Certified SIs enjoyed a healthy revenue growth rate compared to the index.

Some SI company owners may not aspire to grow their companies beyond their small company status. They may want to preserve the small company feel, or they may want to remain involved in technical decision making. Setting such strategic direction is a benefit of owning your company. Deploying BPs remains a valid course of action, however, as they enable profitability improvement and create a more robust organization no matter the size. This can empower owners and improve their work-life balance.

### Median revenue growth for CSIA-Certified U.S. companies exceeded index past four years



*NOTE: The relevant index used for comparison is the revenue growth rate of Rockwell Automation for their U.S. business. This company holds a leadership position in the U.S. market and makes for a good proxy for the automation industry in the U.S. They are a publicly-traded company, and as such are required to disclose this information.*

*NOTE: The graph is based on topline revenue growth for U.S.-headquartered SI companies that applied for CSIA Certification. Evaluated 58 companies out of 94 (excluded incomplete data sets and non-U.S. companies).*

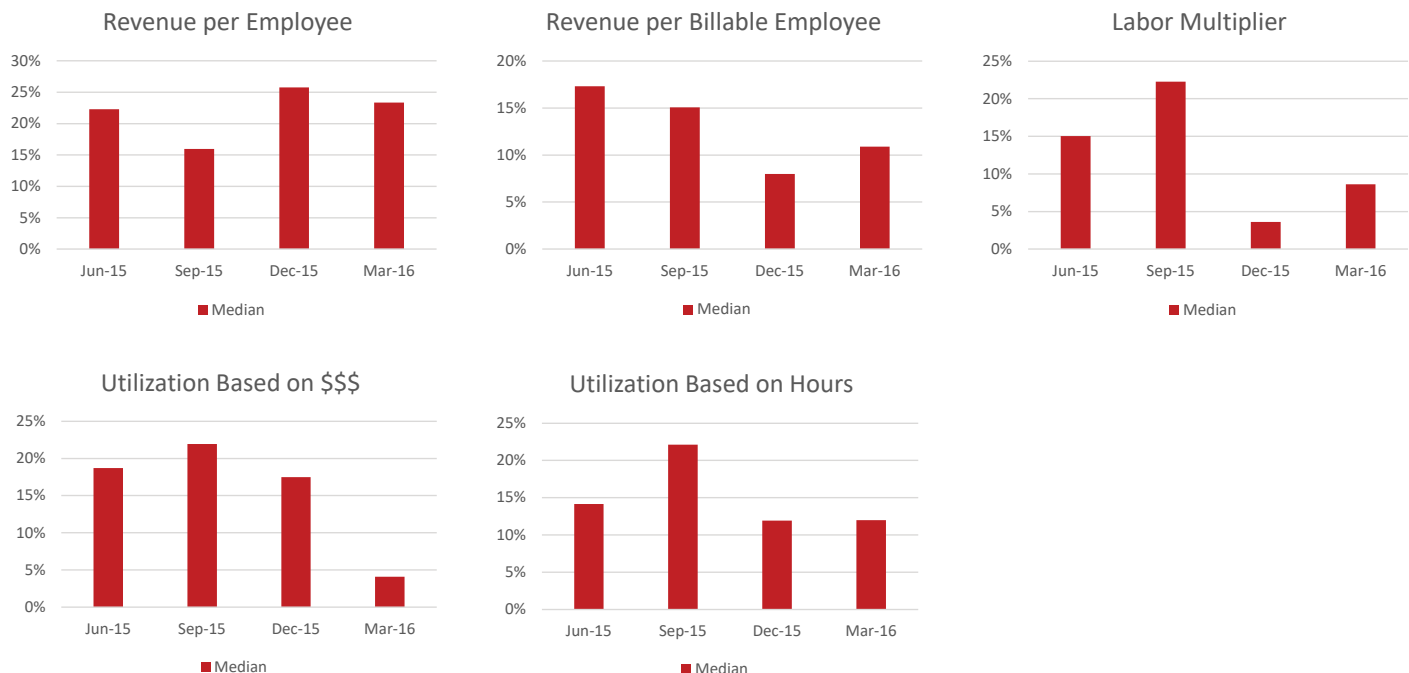
## Business performance:

Just as the different instruments on an airplane dashboard aid pilots in navigating their flights, it is important for company managers to regularly monitor a few KPIs in order to determine the health of their organization and potential developing new trends. The CSIA statistics committee has developed a recommended charter of accounts and associated KPIs that allow SIs to benchmark the performance of their companies. CSIA also offers a benchmarking program called the CSIA Pulse, managed by an independent data-collection company. Quarterly financial information of the participating members is captured to generate KPIs and create relevant benchmarks. Participation is completely voluntary and confidentiality is guaranteed. It must be stated that those SIs that participate in the CSIA Pulse have reached a certain level of maturity allowing them to collect and share the data and to process the results from the group.

Using data from the CSIA Pulse program allowed CSIA to explore the potential link between CSIA Certification and performance. The data covers the quarters from June 2015 to March 2016. Thirty-four companies (in this case, not restricted to the U.S.) made up the sample. Nineteen were CSIA Certified members; 15 were not.

### Certified companies outperform non-certified in five key metrics

Percentage that certified companies outperform non-certified in each metric



*NOTE: The labor multiplier refers to the net net revenue by direct labor; the cost of labor charged to projects.*

*NOTE: Based on information reported by CSIA companies participating in benchmarking program (Pulse). Caveats: 1. Less than two years of data 2. Sample size: 34 total, 19 certified, 15 non-certified 3. Potential selection bias ("Only the healthy go for a checkup") 4. No access to raw data – report prepared by company managing benchmarking platform for confidentiality reasons.*

### Special Thanks

- **David Huffman**, our 2016 summer MBA intern, took on the challenge of tracking down the data and analyzing it for a possible link between company performance and Certified status.
- **Michael O'Shaughnessey**, CEO of iLumen, the third party platform used by the CSIA Pulse program, performs the analysis that compares the KPIs, while maintaining the confidentiality of the financial data.

## Summary

The CSIA Best Practices provide a solid framework to develop the SI company quality system around. These BPs reflect the knowledge gained by SIs over the years and shared freely, in reflection of the true CSIA spirit and true to our mission to advance the industry of control system integration. Any SI company will benefit from deploying the BPs. Gaining the CSIA Certification is a confirmation by a third party that you have deployed them correctly. Maintaining a valid Certification ensures that your company stays on a path of continuous improvement. When approaching Certification, everyone in your company should be involved in the process so that the Best Practices become part of your organization's "DNA." Well-run, reliable control system integration companies benefit not only themselves, but also their clients and automation vendors, impacting the entire industry.

## Who is CSIA?

The Control System Integrators Association (CSIA) is a global, non-profit professional association with a mission to advance the practice of control system integration to benefit our members and their clients. It was founded in 1994 and has over 400 system integrator members and over 100 partner members. While the majority of its members are headquartered in the United States, over 120 of its members reside outside the U.S.

CSIA provides methods and opportunities on how to operate a successful CSI company. The CSIA Best Practices Manual is a guide to run a good company. Our annual Executive Conference, members-only online community and other services are forums for our member companies to network, collaborate and learn.

CSIA also runs the CSIA Industrial Automation Exchange, an online community where integrators, industry suppliers and end-user clients connect with one another, integrate new ideas and improve as businesses, together.

[www.controlsys.org](http://www.controlsys.org) • [www.csiaexchange.com](http://www.csiaexchange.com)

