

# Understanding the Value of NI Training

## Overview

National Instruments recently completed a survey of training customers worldwide to try to understand the value that NI training provides them. While most people agree that training is a good idea, it does not come without costs (the cost of the training as well as the cost of time spent away from work). Sometimes those costs can be difficult to justify if the return is not easily quantifiable. The results of the survey are presented here to help you estimate the return that you may be able to receive by making the investment in training on National Instruments products.

Overall, approximately 89 percent of respondents categorized the return on investment (ROI) for NI training courses as average to extremely high, which indicates that NI training is a relatively low-risk investment. In addition, the average NI training customer achieved the following specific benefits:

- 66 percent faster learning
- 50 percent faster application development
- 43 percent less time spent on maintenance

## Survey Findings

The goal of this survey was to make something as intangible as the value of training more quantifiable. To do that, we asked customers who recently completed NI training course(s) some questions about the value that they had received.

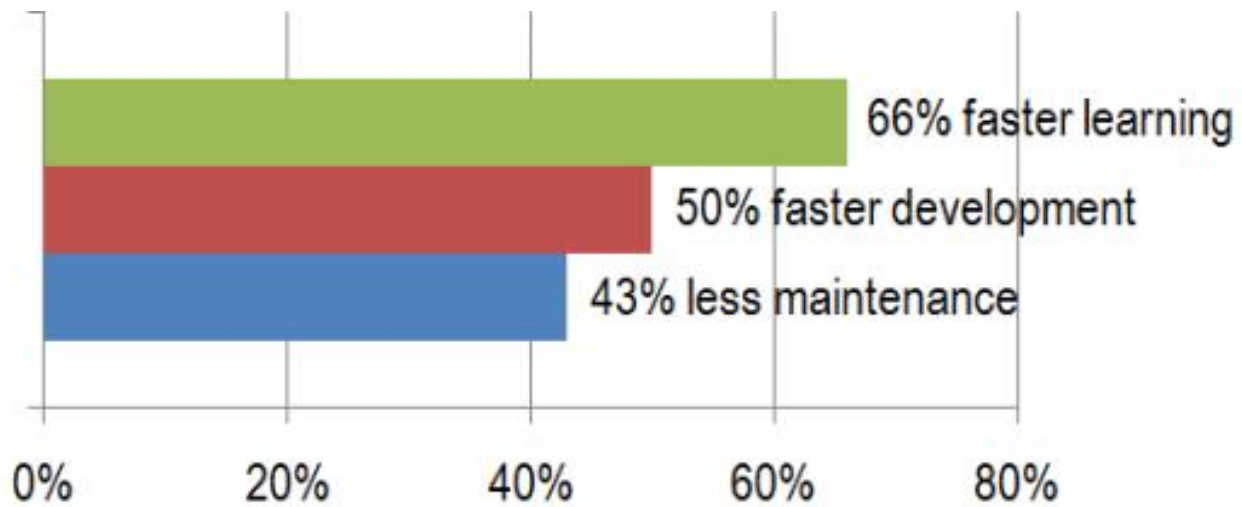
First, we asked customers about their comfort levels with NI products prior to attending the training course(s). Then we asked about their comfort levels after the course(s). Eighty-five percent of worldwide respondents who were not comfortable with NI products prior to taking NI training reported that they were somewhat or extremely comfortable with NI products following the course(s).

	Had never used NI products or had used NI products but were not comfortable with them	
	Frequency	% of Respondents
Somewhat/ extremely comfortable with NI products	323	85.0%
Still not comfortable with NI products	57	15.0%
Total respondents	380	

In addition, we asked survey respondents to estimate the impact of the NI training courses they attended on the following:

- Learning speed – How much more or less time it would have taken to reach their current skill levels with the software if they had not taken NI training. NI training courses typically range from a half day to three days per course.
- Development speed – How much improvement in development speed resulted from taking NI training course(s). In addition to helping attendees become familiar with the software environment, NI training courses teach the most effective and efficient methods for developing applications. Instructors also demonstrate additional time-saving tips and tricks as part of the courses.
- Maintenance time – How much more or less time maintenance or modifications to existing applications had taken or would take as a result of skills learned in NI training course(s). NI training courses not only focus on development techniques but also introduce attendees to useful debugging tools, best practices for documenting code for readability, and techniques for creating modular applications that they can easily modify and reuse.

Respondents were requested to express their answers in terms of a percentage for time saved (including 0 percent for no time saved). The worldwide average response for each of those questions is shown in the chart below. All three factors were significantly improved after respondents took NI training courses.



### Survey Findings by Region

Responses to the questions of time savings differed by region. Below is a table of regional averages for learning, development, and maintenance time reduction. Companies located in a single region can use these to estimate training benefits rather than the worldwide numbers shown above.

	Americas	Asia	Europe
Average % Faster Learning	64%	72%	63%
Average % Faster Development	56%	55%	44%
Average % Less Maintenance	52%	45%	36%
# of Respondents	145	290	206

### Application of Results to a Sample Project

What do these numbers really mean in terms of dollar savings or return on investment? The below table shows calculations made for a sample project using these numbers. The original project, designed to last for six months, involves a single engineer spending 60 percent of his time on developing the application. The project has a three-year life. An upfront investment in training results in significant labor cost savings for a project of this size and a nearly 3X return on investment. If your project differs or you wish to conduct sensitivity analysis with different percentage gains resulting from training than those from this survey, you can use the attached spreadsheet to adjust the calculations.

	Without NI Training	With NI Training
Working days per year	250	250
Annual cost of an engineer (\$)	\$100,000	\$100,000
<b>Learning Phase</b>		
Estimated learning time (days)	30	10
Training course cost (LabVIEW Core 1 & 2 - regional class)	\$0	\$2,998
Travel costs (food, gas, lodging, etc.)	\$0	\$300
Number of engineers involved in learning phase	1	1
Percent of workday spent on project in learning phase per engineer	100%	100%
<b>Development Phase</b>		
Estimated project development time (days)	120	60
Number of engineers on development phase of project	1	1
Percent of workday spent on project in development phase per engineer	60%	60%
<b>Maintenance Phase</b>		
Estimated project maintenance time (days per year)	10	5.7
Estimated application life (years)	3	3
Number of engineers on maintenance phase of project	1	1
Percent of workday spent on project in maintenance phase per engineer	40%	40%
<b>Total Phase Costs</b>		
Expected total labor cost of project - learning phase	\$12,000	\$7,378
Expected total labor cost of project - development phase	\$28,800	\$14,400
Expected total labor cost of project - maintenance phase	\$4,800	\$2,736
<b>TOTAL PROJECT LABOR COST</b>	<b>\$45,600</b>	<b>\$24,514</b>
<b>TOTAL PROJECT LABOR COST SAVINGS with NI training</b>		<b>\$ 21,086</b>
<b>TRAINING ROI</b>		<b>286%</b>

[Calculate the potential cost savings for your project.](#)

## Methodology

This survey includes 659 respondents from the following countries/regions:

- ASEAN
- Brazil
- Canada
- Germany
- Japan
- Mexico
- Poland
- South America
- Spain
- Taiwan
- United States

The survey was conducted via phone or e-mail (depending on country). Respondents represented a variety of experience levels, from beginner to advanced, and took a variety of courses, including LabVIEW Core/Basics, Intermediate, and Advanced; Data Acquisition and Signal Conditioning; TestStand I and II; and RF Fundamentals and Application Development.

## Next Steps

[Calculate the Potential Cost Savings for Your Project](#)

[Learn More about NI Training](#)

[Contact a Local NI Training Representative](#)