ISTQB\textsuperscript{®}
Effectiveness Survey
2016-17
Message from The President

Gualtiero Bazzana, ISTQB® President

ISTQB® [International Software Testing Qualifications Board - www.istqb.org] has created the world’s most successful scheme for certifying software testers. As of December 2016, ISTQB® had administered well over 700,000 exams and issued more than 500,000 certifications in over 117 countries world-wide, with a growth rate of about 50,000 certifications per year.
As a non-profit organization, with its mission of “advancing the software testing profession”, ISTQB® regularly conducts international online surveys to assess trends in the testing industry. In the 2013 “ISTQB® Effectiveness Survey”, we collected market feedback on the impact of ISTQB® certifications; in 2015 we conducted a survey focused on “Worldwide Software Testing Practices”. In this latest “ISTQB® Effectiveness Survey”, we ask for additional feedback from testing professionals and analyse how trends and demands are changing.

The survey covers several topics including insight into the motivation for ISTQB® certification, the relevance of the syllabi, the impact of training and what should be included in the future roadmap. We think it provides useful information for anyone working in or involved in testing, as well as providing valuable direction for further evolution of the ISTQB® scheme. This is an exciting time in the testing industry and the survey data will help ensure that ISTQB® develops and maintains syllabi that continue to reflect changing testing practices and meets market demands.

The survey was designed by the ISTQB® Marketing Working Group and endorsed by ISTQB® Member boards, accredited training providers and exam providers, collecting more than 2,000 responses from 84 countries.

I would like to thank all of you who responded to the survey; your valuable feedback will contribute significantly to the future of the ISTQB® scheme.
Executive Summary

1. More than two thousand people from 84 countries contributed to the ISTQB® effectiveness survey. In this year’s survey, respondents geographic distribution is quite well balanced.

2. The outcome of the 2016 survey confirms the results of the one done in 2013, with a very positive evaluation of the ISTQB® certification scheme.

3. Employee career path development is the main motivation for managers for having their employees achieve ISTQB® CTFL certification. This was the main motivation in the 2013 survey also; in 2016 there is a significant increase in its preference from almost 40% to almost 80%.

4. The survey results would suggest that career path development is an important topic that can be supported by the ISTQB® certification scheme.
There is high and growing interest in ISTQB® Advanced Level certification. There is a ~20% increase in demand compared to the 2013 survey response data.

The survey confirms that certification exam reflects the knowledge of the candidates to a very good extent.

Most selected topics for future certifications are Cloud testing, Test metrics and test effort estimation, User Acceptance testing, Web Based Application testing, and Test data management.

Based on the ISTQB® Foundation and Advanced Level certifications' estimations, the maturity level of software testing certification market has increased.
Respondents
Profiles

North America: 23%
Central and South America: 4%
In which country do you currently work?

More than two thousand people from 84 countries contributed to the ISTQB® effectiveness survey. In this year’s survey, respondents’ geo distribution is more aligned with the overall ISTQB® certification distribution compared to the respondents’ geo distribution in the survey conducted in 2013.
How many years of experience do you have in software testing?

- Less Than 1 Year: 11.71%
- 1-5 Years: 41.14%
- 6-10 Years: 25.16%
- 11-15 Years: 16.66%
- 16-20 Years: 9.03%
- 21-25 Years: 3.74%
- More Than 25 Years: 4.27%

2016 survey respondents have a similar distribution in testing work experience to those in the 2013 survey. More than half of the respondents have 5 years and more experience.
How many employees does your organization have?

44% of respondents are employed within larger enterprise organizations with more than 500 employees. Companies with up to 100 employees have a high representation in this year’s survey.
Which from the next statements will better describe your role in testing?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defines or Define and Execute Test</td>
<td>56%</td>
</tr>
<tr>
<td>Manage / Lead Test Engineers</td>
<td>33%</td>
</tr>
<tr>
<td>Consulting / Training for Test Managers and Engineers</td>
<td>11%</td>
</tr>
</tbody>
</table>

Majority of the survey responses were received from test engineers who define or define and execute tests.
**To which industry does your organization belong?**

<table>
<thead>
<tr>
<th>Industry</th>
<th>2016</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers (Hardware, Desktop Software)</td>
<td>28%</td>
<td>32%</td>
</tr>
<tr>
<td>Finance / Banking / Insurance</td>
<td>14%</td>
<td>17%</td>
</tr>
<tr>
<td>Consulting</td>
<td>13%</td>
<td>20%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Aerospace / Aviation / Automotive</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Healthcare / Medical</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Internet</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Government / Military</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Education</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Engineering / Architecture</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Pharmaceutical / Chemical</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Research / Science</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Similar to the previous ISTQB® effectiveness survey conducted in 2013, the highest number of survey participants are from computers, finance, and consulting – more than half of the respondents belong to companies in these industries.
How many years of management experience do you have?

More than half of the managers who answered the survey have management experience of 5 or more years.
Foundation Level
What was your motivation in obtaining your ISTQB® Certified Tester Foundation Level (CTFL) certification?

There is almost no change in the motivations to obtain ISTQB® Certified Tester Foundation Level (CTFL) certification in comparison to the 2013 survey. Career path development and test skill development are the main motivators.
What was your motivation to have your employees achieve ISTQB® Foundation Level (CTFL) certification?

Employee career path development is the main motivation for managers to have their employees achieve ISTQB® CTFL certification. Employee career path development was also the main motivator in survey 2013, but this year’s survey demonstrates a sharp increase in its preference from almost 40% to almost 80%. Company image improvement (38%) has also become more important to respondents than in the 2013 survey.
What percentage of your testing staff would you like to see certified at the ISTQB® Foundation Level?

2016  2013

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>2016</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-25% of Staff</td>
<td>13.8%</td>
<td>9.2%</td>
</tr>
<tr>
<td>30-50% of Staff</td>
<td>16.4%</td>
<td>13.1%</td>
</tr>
<tr>
<td>55-75% of Staff</td>
<td>11.7%</td>
<td>10.8%</td>
</tr>
<tr>
<td>80-100% of Staff</td>
<td>58.1%</td>
<td>66.9%</td>
</tr>
</tbody>
</table>

More than half of the managers who answered the survey are considering 80% or more of their staff obtaining ISTQB® CTFL certification. There is a small decline (58% vs 67%) in managers still strongly preferring their team to reach high levels of certification coverage.
To what extent do you think the ISTQB® CTFL certification will affect/improve your future?

Respondents perceive that ISTQB® CTFL certification will affect/improve their future by improving their test skills (82%) and in supporting their career path (81%).

**Your Career Path**
- High Degree: 33%
- Some Degree: 48%
- Low Degree: 19%

**Your Income**
- High Degree: 14%
- Some Degree: 43%
- Low Degree: 43%

**Colleagues’ Recognition**
- High Degree: 15%
- Some Degree: 49%
- Low Degree: 36%

**Your Test Skills**
- High Degree: 37%
- Some Degree: 45%
- Low Degree: 18%
To what extent does ISTQB® certification meet your expectations?

52% of respondents state that ISTQB® certification fully meets or exceeds their expectation. 34% consider that ISTQB® certification meets their expectation partially and only 6% indicated that their expectations are not met. These results are in parallel with the results of the previous survey conducted in 2013.
Would you recommend the ISTQB® Foundation Level (CTFL) certification to your colleagues?

Yes  90%
No    10%

In parallel with the results of the previous survey conducted in 2013, 90% of the respondents are happy to recommend the ISTQB® Foundation Level (CTFL) certification to their colleagues. This result demonstrates a high level of satisfaction of testers and managers with CTFL certification.
How well does the ISTQB® CTFL syllabus meet your expectations?

The ISTQB® CTFL syllabus is meeting (partially, fully or exceedinglgy) the expectations of 95% of the testers and managers who answered the survey.

ISTQB® is committed to ensuring that test professionals and employers are satisfied with ISTQB® certification products. ISTQB® is working hard to maintain syllabuses that are relevant and that add value reflecting new trends and terminologies in software testing.
To what extent do you feel the ISTQB® Foundation Level certification exam reflects the knowledge of the candidates?

71% of respondents consider that the ISTQB® Foundation Level certification exam reasonably well or exceedingly well reflects the knowledge of the examinees. The same level of satisfaction was demonstrated by testers and managers in the previous survey conducted in 2013.
Training
Did you take a formally accredited training course before the certification exam?

Survey results indicate that 47% respondents prepare for ISTQB® CTFL certification by attending a formally accredited training course (52% of managers and 44% of testers).

Compared to the previous survey conducted in 2013, this year’s survey shows a 17% decrease in the percentage of the respondents who are taking accredited training.
How significant do you think the training was in your certification success?

Majority of the respondents (81%) indicate the significant value of training to certification success. The satisfaction levels of testers (80%) and managers (84%) are significantly higher than their satisfaction levels in 2013 (66% and 60% respectively).
Advanced Level
How important do you think it is to obtain an ISTQB® Advanced Level (CTAL) certification?

Similar to the previous survey conducted in 2013, Advanced Level certification is highly rated by respondents. 72% of managers and 66% of testers indicated that obtaining Advanced Level certification is significantly or very significantly important to their careers.
Do you plan to obtain an ISTQB® Advanced Level certification?

More respondents are planning to obtain an ISTQB® certification amongst managers and testers in 2016. 73% of managers (19% growth compared to the survey in 2013) and 73% of testers (21% growth compared to the survey in 2013) are interested in ISTQB® Advanced Level certification.
What percentage of your testing staff would you like to see certified at an ISTQB® Advanced Level?

Managers want to see more ISTQB® Advanced Level certified testers in their teams. The percentage of managers who want 51% or more of their team composed of ISTQB® Advanced Level certified testers has grown from 19% in 2013 to 28% in 2016.
ISTQB®
Portfolio
Please select at least 3 topics that you would like ISTQB® to address in the future.

Cloud Testing 33%
Test Metrics and Test Effort Estimation 30%
User Acceptance Testing 28%
Web Based Application Testing 24%
Test Data Management 24%
Business Intelligence / Big Data Testing 22%
Release Management 22%
Internet of Things Testing 21%
Exploratory Testing 21%
Embedded Systems Testing 19%
Configuration Management in Testing 17%
Testing Systems of Systems 16%
Test Environments Management 16%
Systems Integration Testing 16%
Non Regression Testing 15%
Testing in Finance 14%
Component Testing 14%
Testing in Telecommunications 13%
Managing Distributed Teams: Near-Shore, Off-Shore, On-Shore 13%
Effective Reviews 12%

In addition to the highest rated topics from the 2013 survey already addressed by ISTQB®, this year’s survey’s hot topics for certification are cloud testing (34% of respondents), test metrics and test effort estimation (30% of respondents), and user acceptance testing (28% of respondents).
Would you be interested in ISTQB® testing certification in the subjects that we have just released or on our road-map?

The latest additions to the ISTQB® portfolio/roadmap of most interest to respondents are Test Automation certification (about 70% of respondents), Mobile testing certification (more than 50% of respondents) and Security testing certification (about 50% of respondents).

Agile testing advanced certifications (Technical Aspects), Performance testing certification, and Usability testing certification were of interest to 44% or more of the respondents.
Credits

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