ISTQB

International Software Testing
Qualifications Board

ISTQB®

Effectiveness Survey

2013-14

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Qualifications Board

About the Survey

The ISTQB® testing certification scheme continues to lead the profession with more than over 300 000 testing professionals certified worldwide as of June 30th, 2013. This reflects the confidence that organizations and individuals have in the scheme and the body of knowledge on which it is based.

As part of its commitment to continuous improvement and the advancement of the software testing profession, in 2013 ISTQB® (www.istqb.org) conducted an international online survey of test engineers and managers.

The survey was designed by the ISTQB® Marketing Working Group and endorsed by ISTQB® Member boards, accredited training providers, and exam providers.

It was open from 7 June 2013 to 1 October 2013 and several thousand responses were received from almost 70 countries.

Two versions of the survey were available. One for test engineers, comprising 21 questions, and another for test managers, which contained 24 questions.

This report presents the results of the "ISTQB® Test Certification – 2013-2014 Survey" and we would like to sincerely thank everybody who contributed.

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Message from the President

For over 10 years the ISTQB® has been committed to delivering a high quality certification scheme for software testing professionals. To ensure we develop and maintain syllabi that reflect changing testing practices and that meet market demands we conducted the 2013 ISTQB® survey, the results of which are published in this report.

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.

Chris Carter, ISTQB® President

The most significant findings from the first ISTQB® Effectiveness survey.

1 The majority of Test Engineers undertook the ISTQB® CTFL certification in order to enhance their career prospects (80%) and develop their testing skills (70%).

2 The majority of Test Managers believe that participating in the ISTQB® certification scheme will positively impact testing quality in their projects (75%) and will enable them to provide a positive career path to their employees (55%).

3 Test Engineers and Test Managers alike are highly satisfied with the ISTQB® CTFL certifications and happy to recommend these to their colleagues (91% - Test Engineers, 94% - Test Managers).

4 The ISTQB® Foundation Level certification exams are seen as providing a reliable assessment of candidate knowledge.

5 Test Managers would like to have approximately 75% of their staff certified at the Foundation Level.

6 Approximately 70% of Test Managers consider it important to obtain Advanced Level certifications, and this opinion is shared by 63% of Test Engineers.

7 The new Expert Level certifications are generating a significant amount of interest.

8 There is strong demand for Agile certification throughout the world and across all major industries (85% of respondents are interested).

9 Approximately 70% of survey participants attribute a significant part of their certification success to the courses they undertook from accredited training providers.
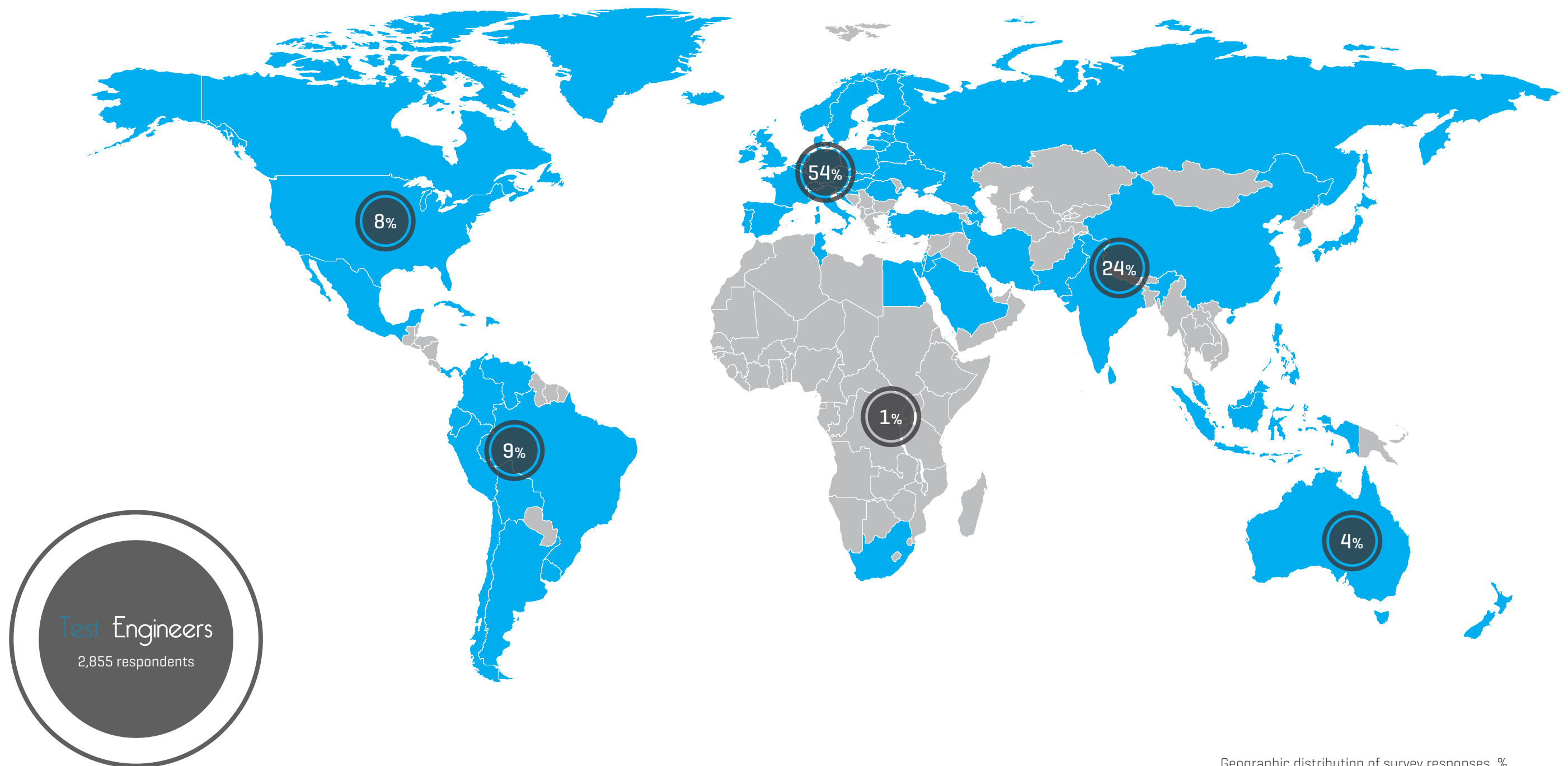
10 In addition to Agile Testing, the following have emerged as the most important topics for the future: Performance Testing, Testing for Mobile Devices, and Usability Testing.
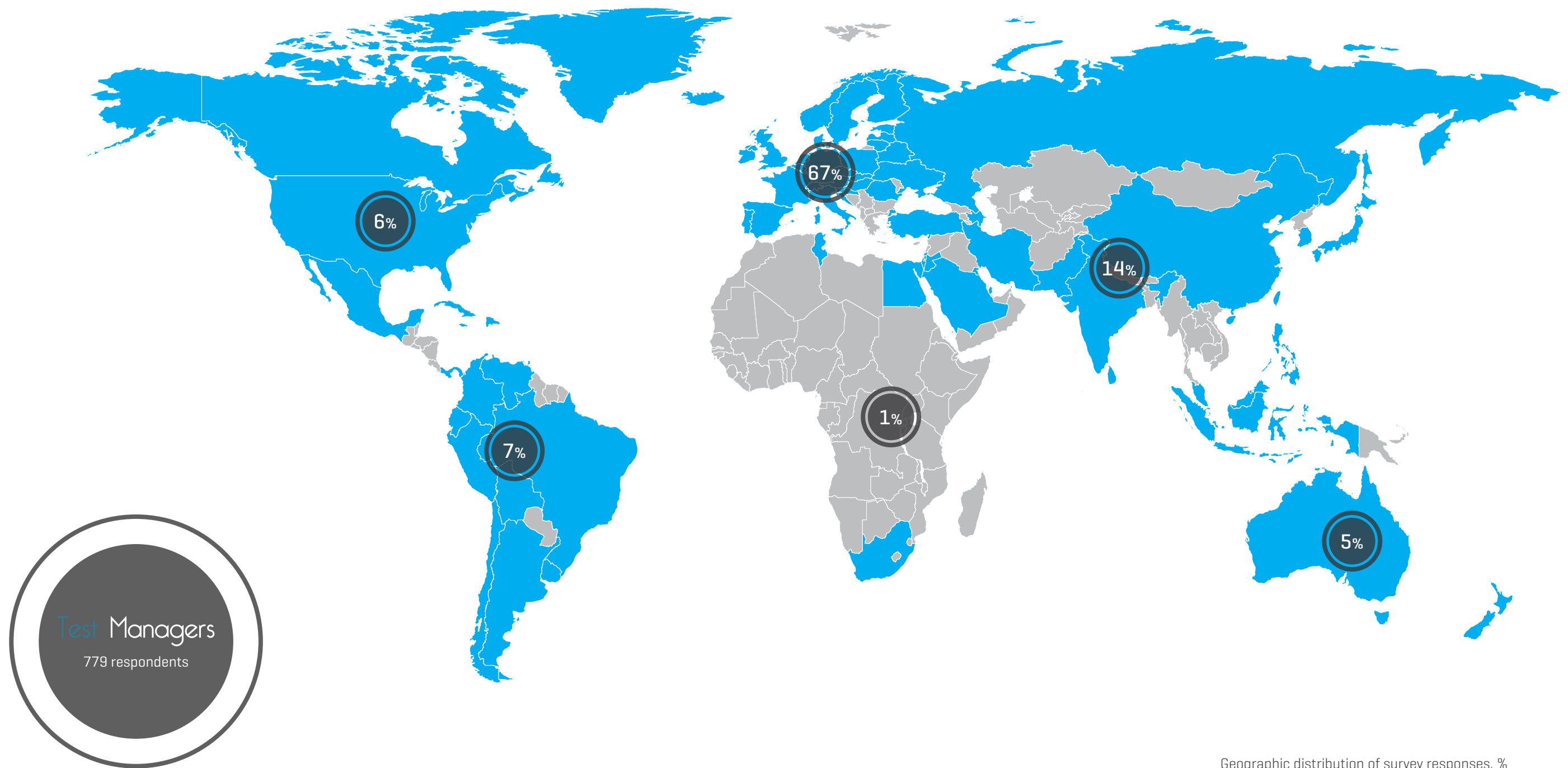
RESPONDENT PROFILE

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Geographic distribution of survey responses, %

54%

8%

24%

1%

9%

4%

Test Engineers
2,855 respondents

Geographic distribution of survey responses, %

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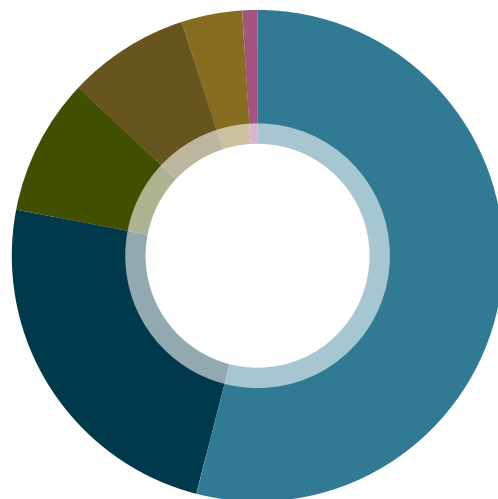
67%

6%

14%

7%

1%

5%

Test Managers
779 respondents

Geographic distribution of survey responses, %

In which country do you currently work?

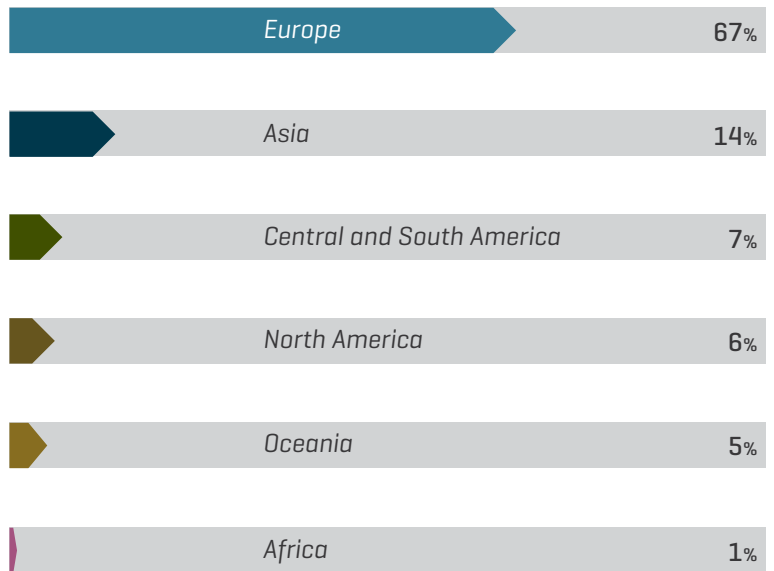|	
Afghanistan	Lithuania
Algeria	Luxembourg
Andorra	Malaysia
Argentina	Maldives
Australia	Malta
Austria	Mexico
Belgium	Netherlands
Bolivia	New Zealand
Brazil	North Korea
Canada	Norway
Chad	Pakistan
Chile	Palestine
China	Panama
Colombia	Peru
Costa Rica	Poland
Croatia	Portugal
Cuba	Romania
Czech Republic	Russian Federation
Denmark	Saudi Arabia
Ecuador	Serbia
Egypt	South Africa
El Salvador	South Korea
Estonia	Spain
Finland	Sri Lanka
France	Sweden
Germany	Switzerland
Hungary	Tunisia
Iceland	Turkey
India	Ukraine
Indonesia	Uni. Arab Emirates
Ireland	U.K. of Great Britain
Israel	U.S. of America
Italy	Uruguay
Jordan	Venezuela
Latvia	

Test Engineers

Region	%
Europe	54%
Asia	24%
Central and South America	9%
North America	8%
Oceania	4%
Africa	1%
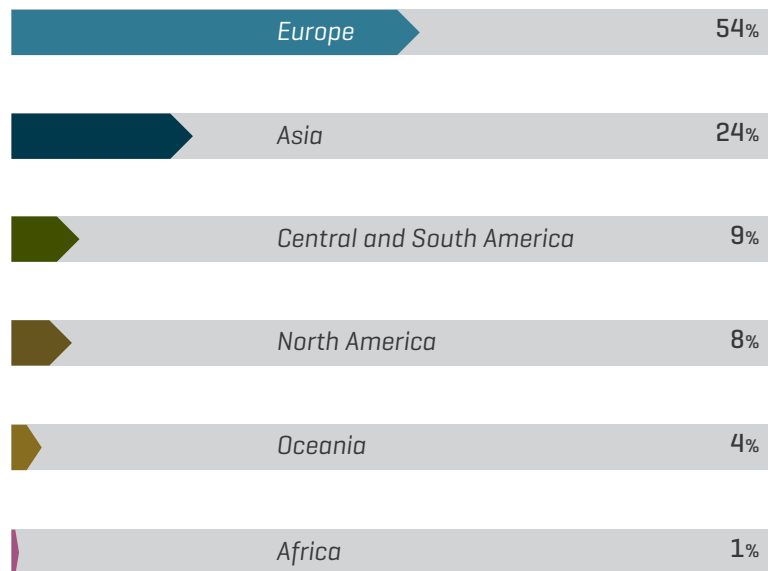
Argentina	Luxembourg	
Australia	Malaysia	
Austria	Mexico	
Azerbaijan	Netherlands	
Belgium	New Zealand	
Bolivia	Norway	
Brazil	Pakistan	
Bulgaria	Paraguay	
Canada	Peru	
Chile	Poland	
China	Portugal	
Colombia	Romania	
Croatia	Russian Federation	
Cuba	Serbia	
Czech Republic	Slovakia	
Denmark	South Africa	
Ecuador	South Korea	
Egypt	Spain	
Estonia	Sri Lanka	
Finland	Sweden	
France	Switzerland	
Germany	Tunisia	
Hungary	Turkey	
Iceland	Ukraine	
India	Uni. Arab Emirates	
Ireland	U.K. of Great Britain	
Israel	U.S. of America	
Italy	Uruguay	
Jordan	Venezuela	
Latvia		

Test Managers

Region	%
Europe	67%
Asia	14%
Central and South America	7%
North America	6%
Oceania	5%
Africa	1%
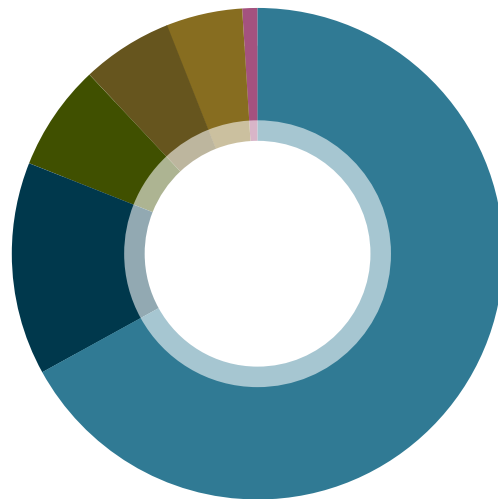
How many years of experience do you have in software testing?

Test Engineers

< 01 years	3,46%
01-05 years	52,59%
06-10 years	27,17%
11-15 years	10,14%
16-20 years	3,5%
21-25 years	1,83%
> 25 years	1,3%

Test Managers

01-05 years	23%
06-10 years	39,6%
11-15 years	23,2%
16-20 years	9,8%
21-25 years	2,2%
> 25 years	2,15%
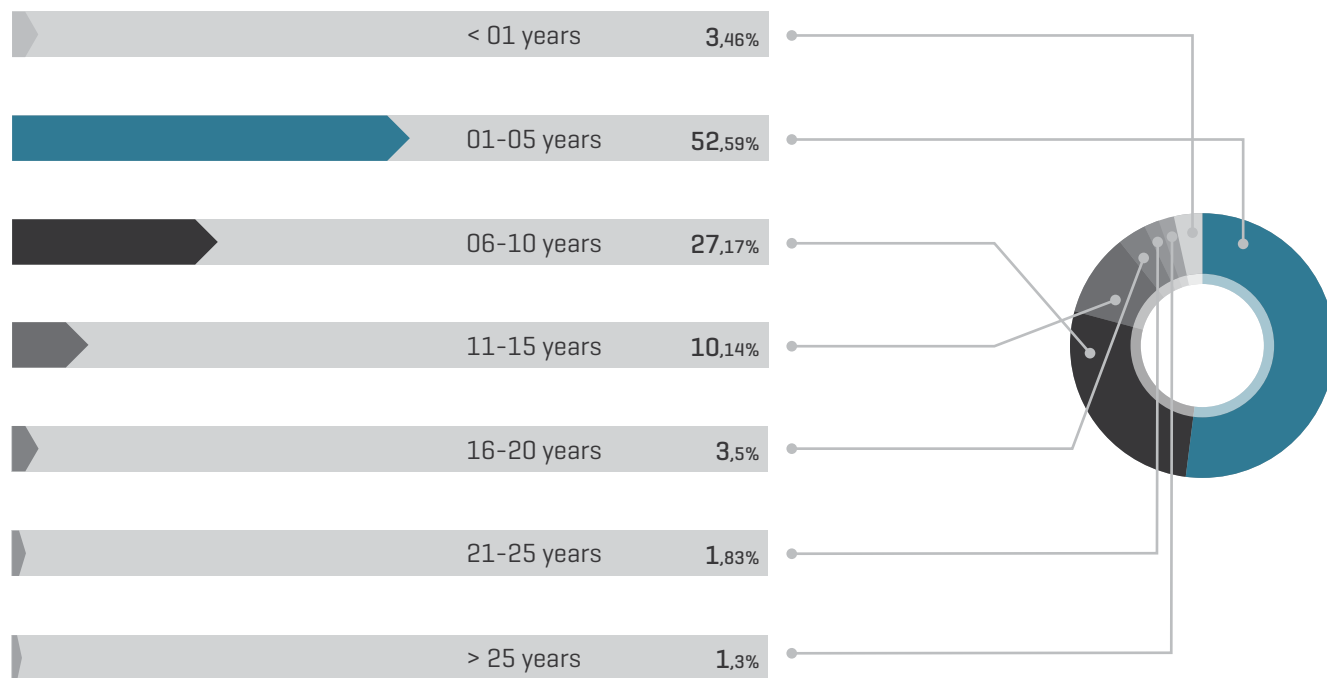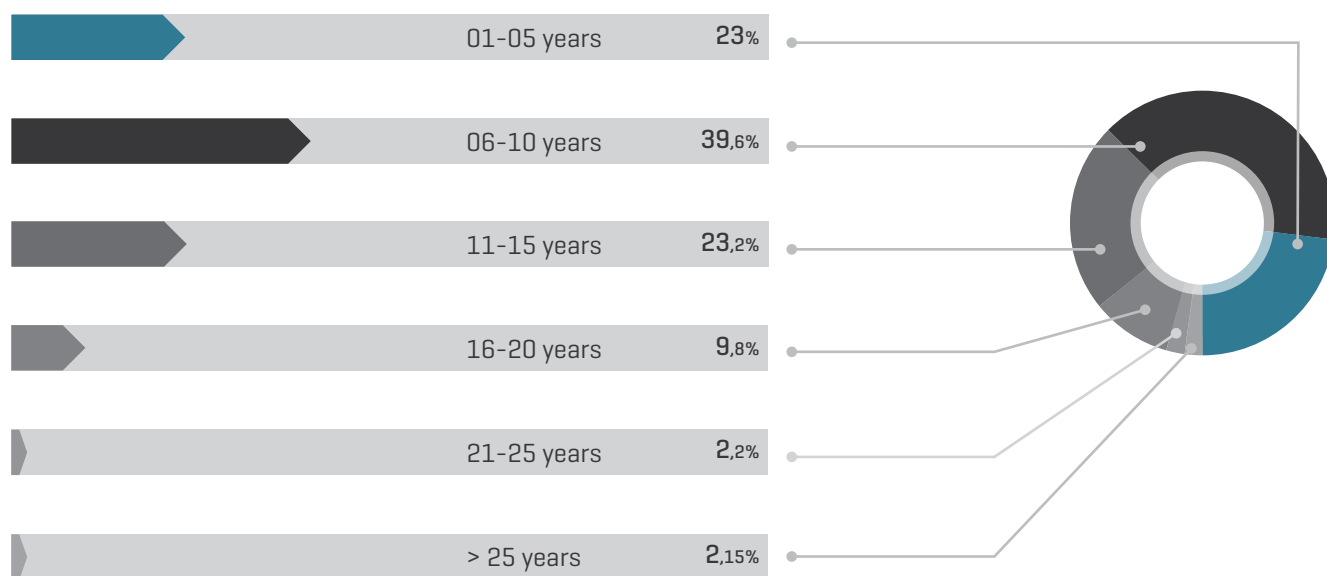
To which industry does your organization belong?

Test Engineers

Industry	Percentage
Software/ Hardware Development	
Consulting	
Finance / Banking / Insurance	
Telecommunications	
Goverment / Military	
Health / Medical	
Aerospace / Aviation / Automotive	
Engineering / Architecture	
Education	
Internet	
Phermaceutical / Chemical	
Research / Science	
Biotechnology	

05% 10% 15% 20% 25% 30% 35% 40%

Test Managers

Industry	Percentage
Software/ Hardware Development	
Consulting	
Finance / Banking / Insurance	
Telecommunications	
Other	
Goverment / Military	
Aerospace / Aviation / Automotive	
Health / Medical	
Internet	
Engineering / Architecture	
Research / Science	
Education	
Phermaceutical / Chemical	
Biotechnology	

05% 10% 15% 20% 25% 30% 35% 40%

How many years of management experience do you have?

Experience, years
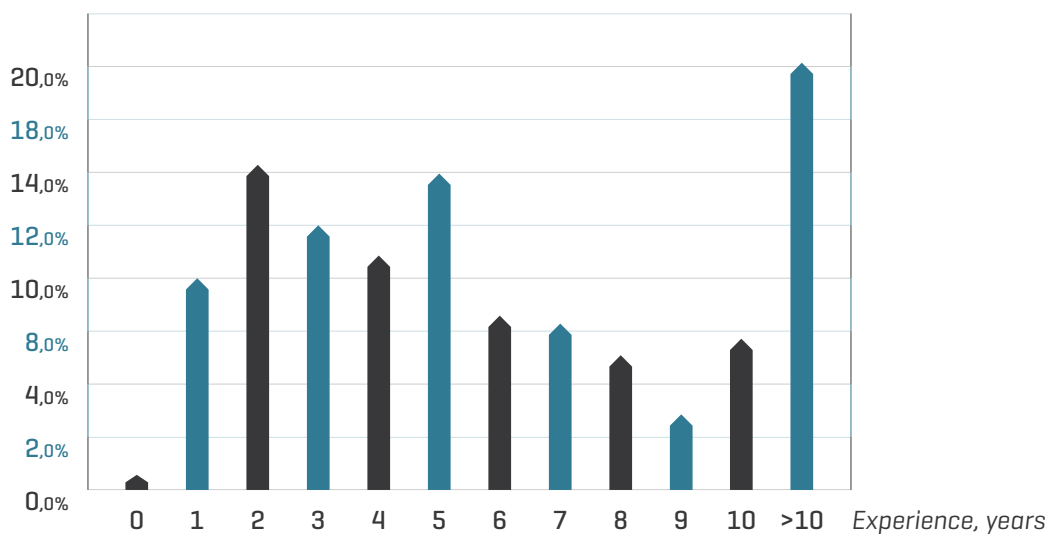
What is your highest educational level?

Test Engineers

Degree in a computer-related field	57,5%
Degree in a non-computer-related field	26,7%
Doctoral degree	1,2%
High school	15,8%
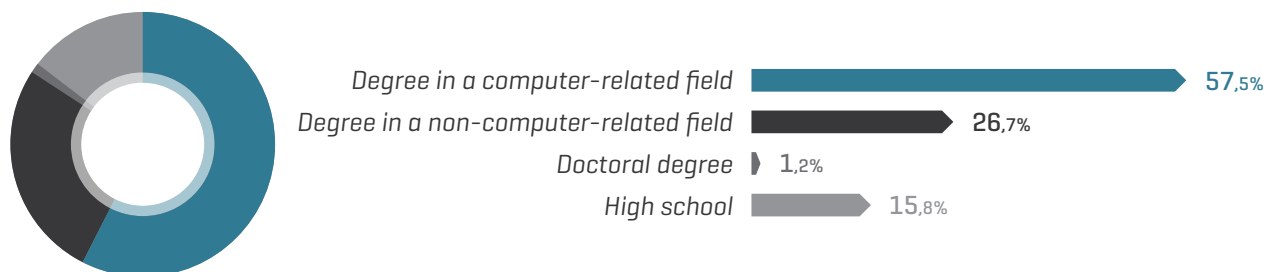
As a Test Engineer, how long have you held your ISTQB® Foundation Level (CTFL) certification?

Up to 3 years	78,1%
04-06 years	16,5%
More than 6 years	5,5%
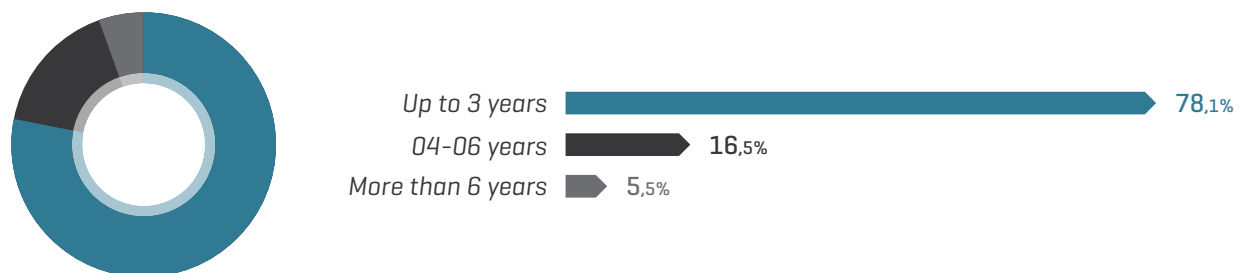
As a Test Manager, do you hold an ISTQB® Foundation Level (CTFL) certification?

Yes	85%
No	15%

How many test professionals does your organization have?

Test Managers

05% 10% 15% 20% 25% 30% 35% 40%
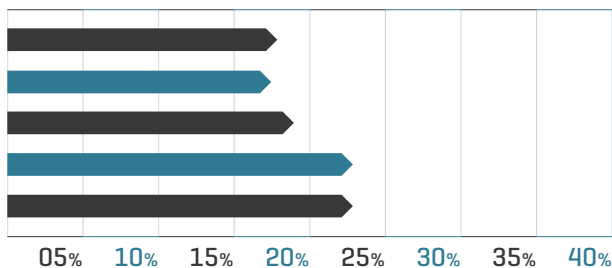
"<5 Testing Professionals"

"6 - 10 Testing Professionals"

"11 - 25 Testing Professionals"

"26 - 100 Testing Professionals"

">100 Testing Professionals"

ISTQB®
CTFL – CERTIFIED TESTER
FOUNDATION LEVEL

As a Test Engineer, what was your motivation in obtaining your ISTQB® CTFL certification?

Test Engineers

The majority of Test Engineers took the ISTQB® CTFL certification in order to enhance their career path (80%) and develop their testing skills (70%)

Some believe it will help them get more recognition from their colleagues (25%) or increase their income (20%).
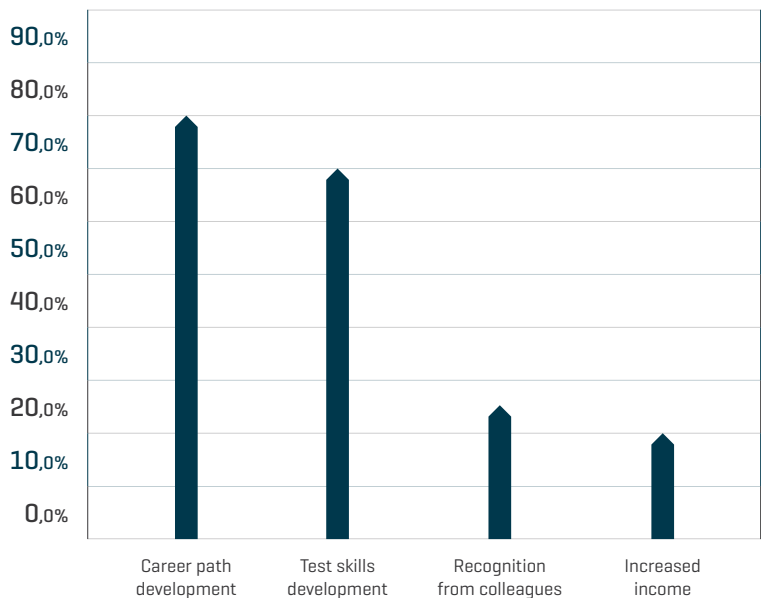
As a Test Manager, what was your motivation to have your employees achieve ISTQB® Foundation Level (CTFL) certification?
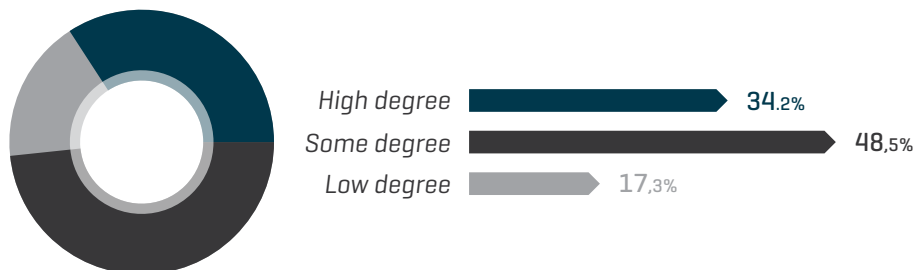
Test Managers
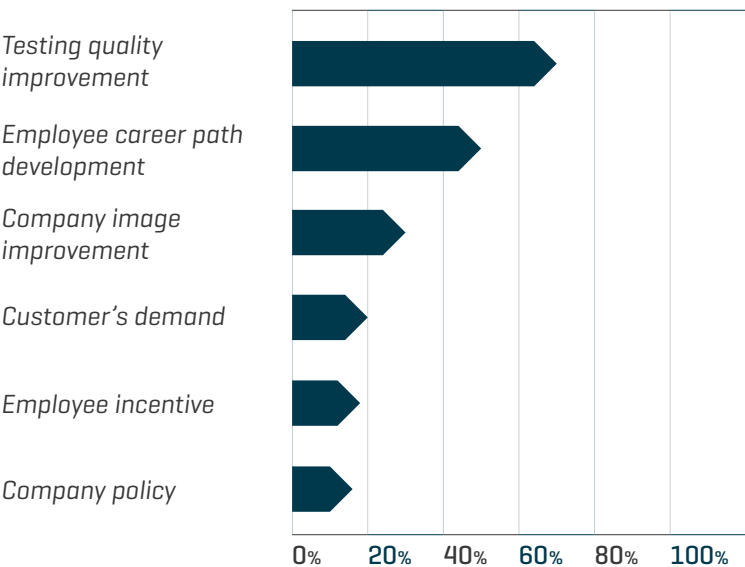
The majority of Test Managers believe that participating in the ISTQB® certification scheme will positively impact testing quality in their projects (75%), and will enable them to provide positive career path to their employees (55%).
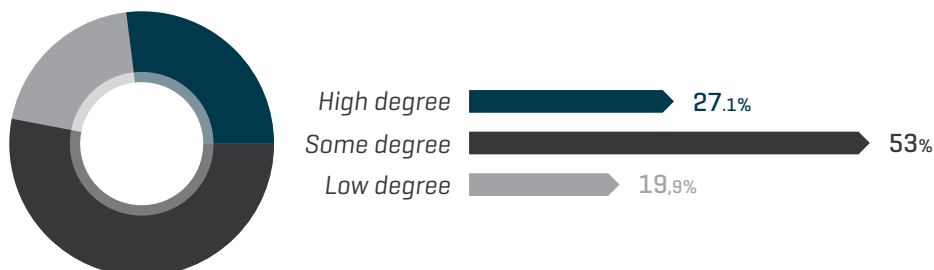
Some Test Managers believe their company image will improve (30%) as a result of having their employees participate in the ISTQB® certification.

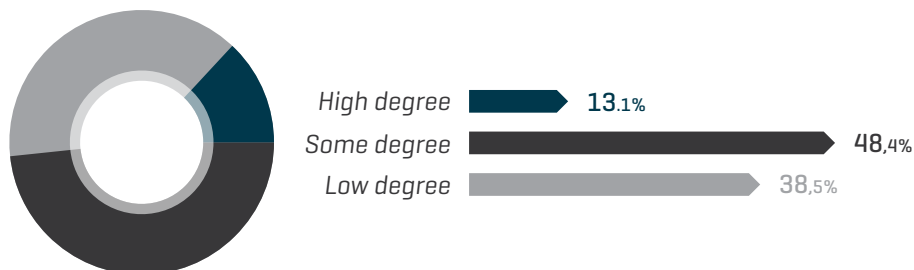# As a Test Engineer, to what extent do you think the ISTQB® CTFL certification will affect/improve your future?
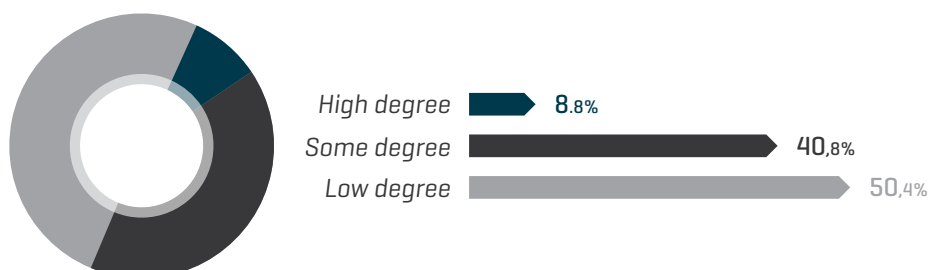
Your test skills

High degree	**34**.2%
Some degree	**48**,5%
Low degree	17,3%

Your career path

High degree	**27**.1%
Some degree	**53**%
Low degree	19,9%

Colleagues' recognition

High degree	**13**.1%
Some degree	**48**,4%
Low degree	38,5%

Your income

High degree	**8**.8%
Some degree	**40**,8%
Low degree	50,4%

The majority of respondents (82.7%) felt that ISTQB® CTFL certification would improve their testing skills, strengthen their career prospects (80.1%), and result in increased recognition from colleagues (61.5%). Almost half the respondents also felt that this might result in a salary increase.

These results reflect the importance people see in ongoing skills development.
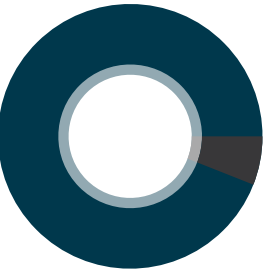
Would you recommend the ISTQB® Foundation Level (CTFL) certification to your colleagues?
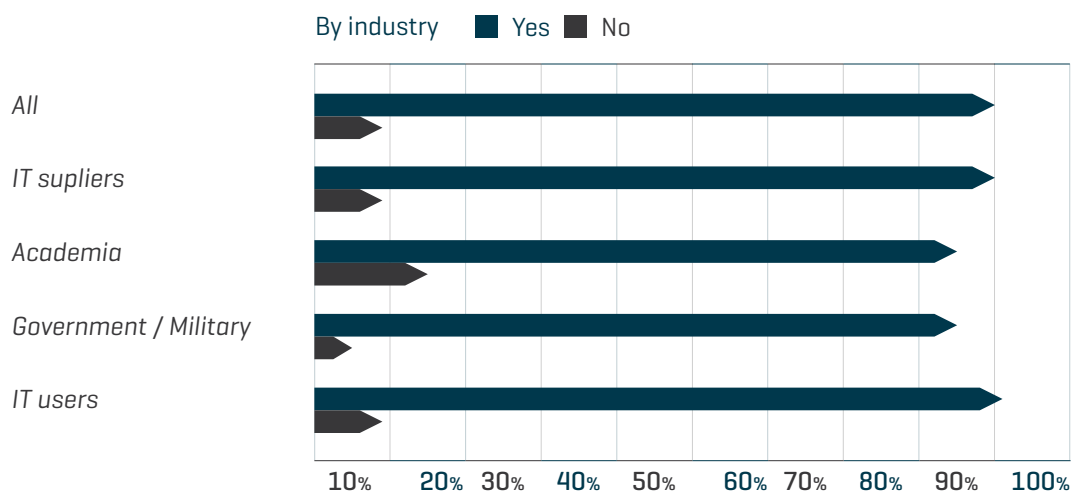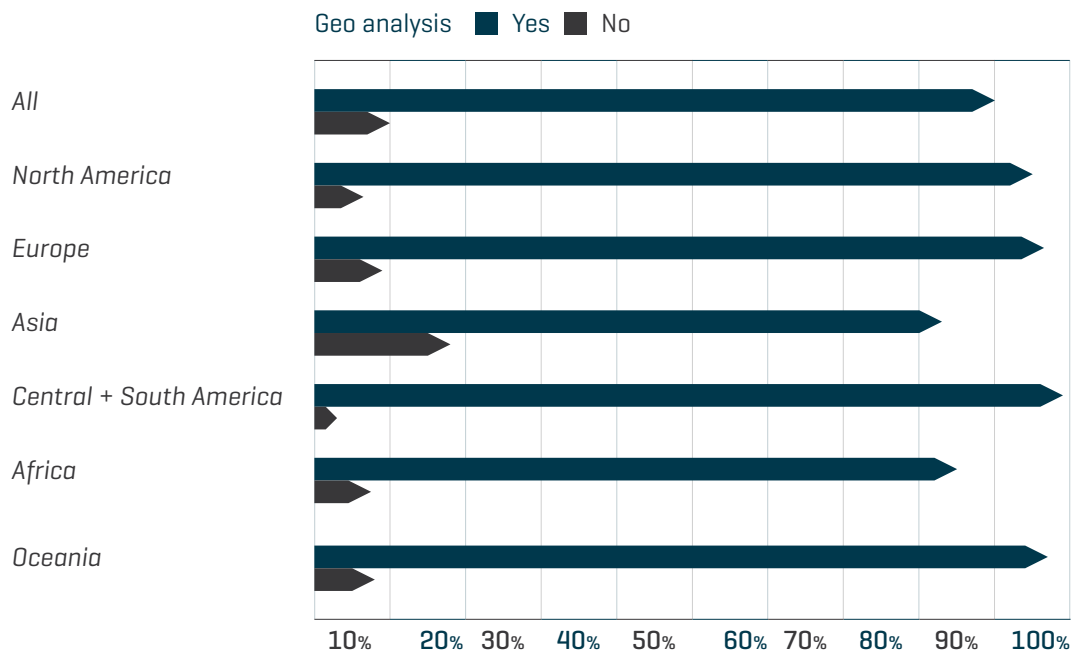
Test Engineers

Yes — 91%
No — 9%

Both Test Engineers and Test Managers are highly satisfied with the ISTQB® CTFL certifications and happy to recommend these to their colleagues (91% - Test Engineers, 94% - Test Managers).

Test Managers

Yes — 94%
No — 6%

Would you recommend the ISTQB® Foundation Level (CTFL) certification to your colleagues?

Test Engineers

Geo analysis ■ Yes ■ No

All	
North America	
Europe	
Asia	
Central + South America	
Africa	
Oceania	

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

By industry ■ Yes ■ No

All	
IT supliers	
Academia	
Government / Military	
IT users	

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

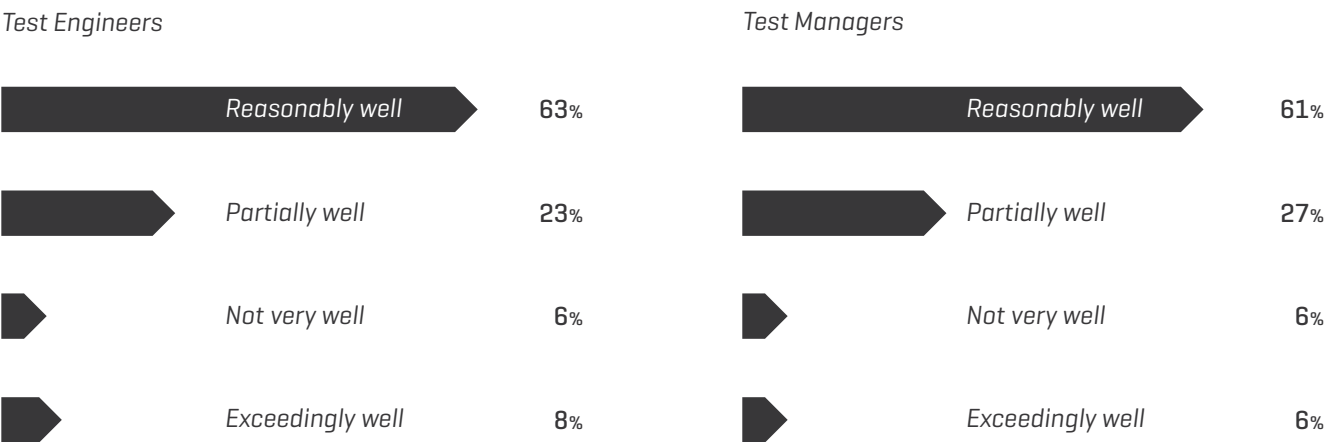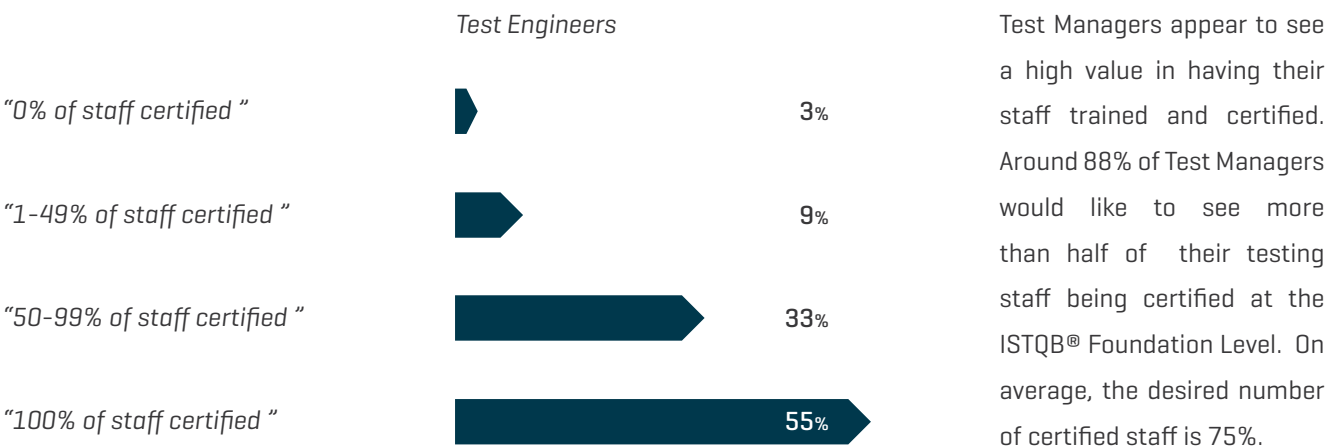## Predictions

The high satisfaction rate of the ISTQB® Foundation Level throughout industries and geographic areas will be a driving force in the continued growth of the ISTQB® at a global level. The forthcoming extensions (like Agile, Model-Based Testing and more) are expected to meet further expectations.

To what extent do you feel the ISTQB® Foundation Level certification exam reflects the knowledge of the candidates?

Test Engineers

Reasonably well	63%
Partially well	23%
Not very well	6%
Exceedingly well	8%

Test Managers

Reasonably well	61%
Partially well	27%
Not very well	6%
Exceedingly well	6%

More than 70% of respondents regard the ISTQB® Foundation Level certification exam as reliable and these results are consistent throughout the world.

As a Test Manager, what percentage of your testing staff would you like to see certified at the ISTQB® Foundation Level?

Test Engineers

"0% of staff certified "	3%
"1-49% of staff certified "	9%
"50-99% of staff certified "	33%
"100% of staff certified "	55%

Test Managers appear to see a high value in having their staff trained and certified. Around 88% of Test Managers would like to see more than half of their testing staff being certified at the ISTQB® Foundation Level. On average, the desired number of certified staff is 75%.

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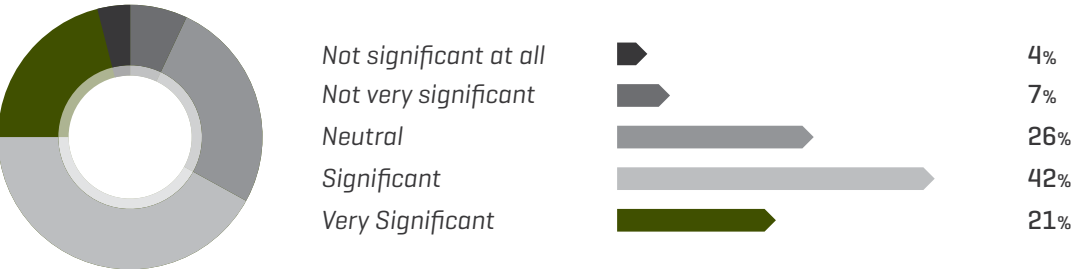# ADVANCED LEVEL
(CTAL) CERTIFICATION

How important do you think it is to obtain the ISTQB® Advanced Level (CTAL) certification?

Test Engineers

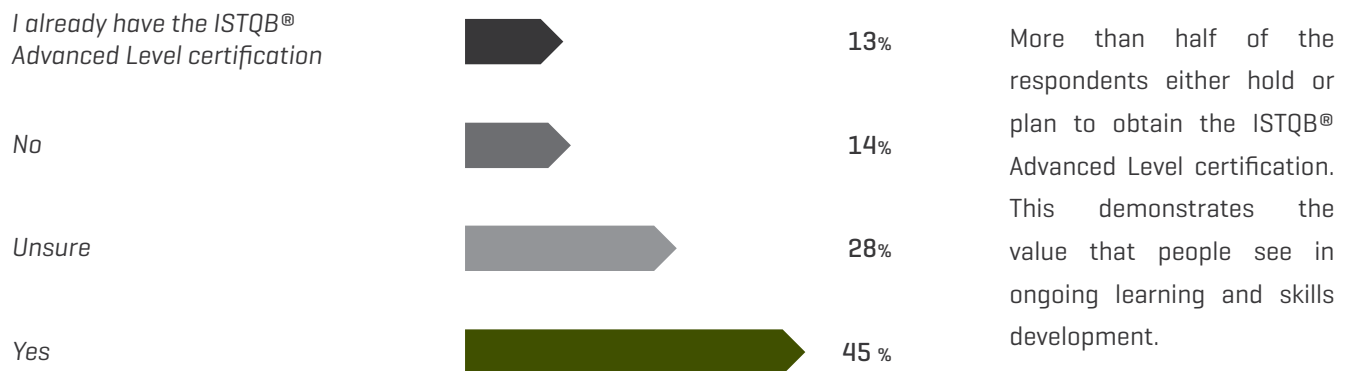|	
Not significant at all	4%
Not very significant	7%
Neutral	26%
Significant	42%
Very Significant	21%

Approximately 70% of Test Managers identified that it is important to obtain the Advanced Level Certification, and this was supported by 63% of Test Engineers.
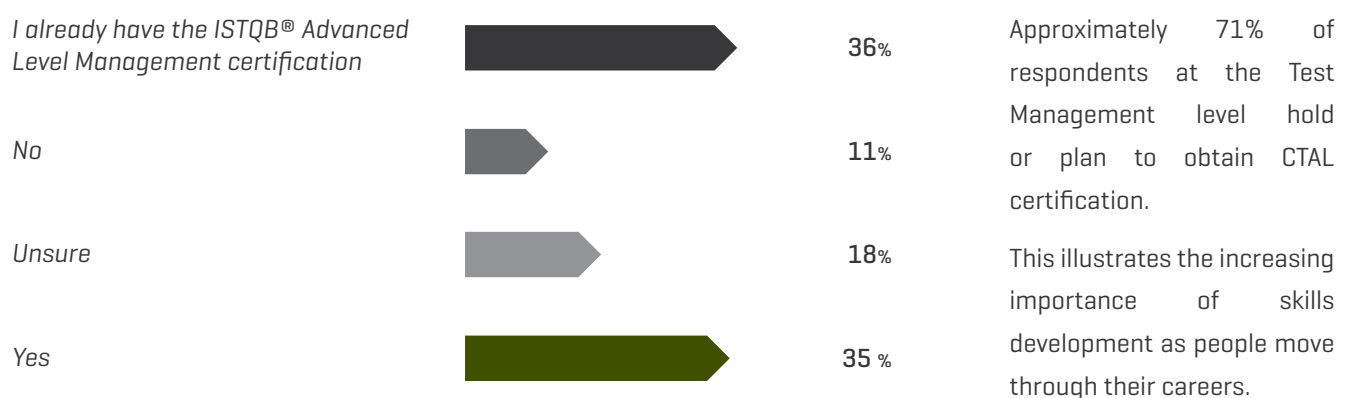
Test Managers

Not significant at all	2%
Not very significant	6%
Neutral	22%
Significant	46%
Very Significant	24%
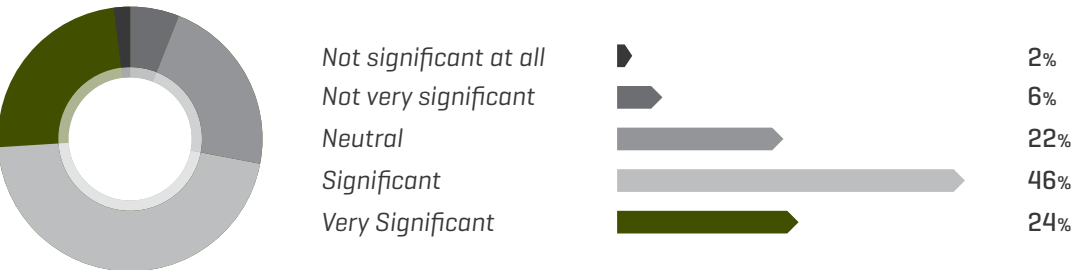
As a Test Engineer, do you plan to obtain the ISTQB® Advanced Level certification?

I already have the ISTQB® Advanced Level certification	13%
No	14%
Unsure	28%
Yes	45%

More than half of the respondents either hold or plan to obtain the ISTQB® Advanced Level certification. This demonstrates the value that people see in ongoing learning and skills development.

As a Test Manager, do you plan to obtain the ISTQB® Advanced Level Test Management certification for yourself?

I already have the ISTQB® Advanced Level Management certification	36%
No	11%
Unsure	18%
Yes	35%

Approximately 71% of respondents at the Test Management level hold or plan to obtain CTAL certification.

This illustrates the increasing importance of skills development as people move through their careers.

As a Test Manager, what percentage of your testing staff would you like to see certified at the ISTQB® Advanced Level?

Almost all of the Test Managers surveyed would like to see ISTQB® Advanced Level certified staff within their test team. Half of the respondents would like to have 26% or more of their staff certified at the advanced level.

Clearly, there is a demand for advanced level certifications and we can expect that ISTQB® Advanced Level certification will become as important in recruitment processes, as is the Foundation certification.

"0% of staff certified"	6%
"1-10% of staff certified"	16%
"11-25% of staff certified"	28%
"26-50% of staff certified"	31%
"51-99% of staff certified"	11%
"100% of staff certified"	8%

EXPERT LEVEL

Do you plan to obtain an ISTQB® Expert level certification in next 3 years?

Test Engineers

No	26%
Unsure	43%
Yes	31%
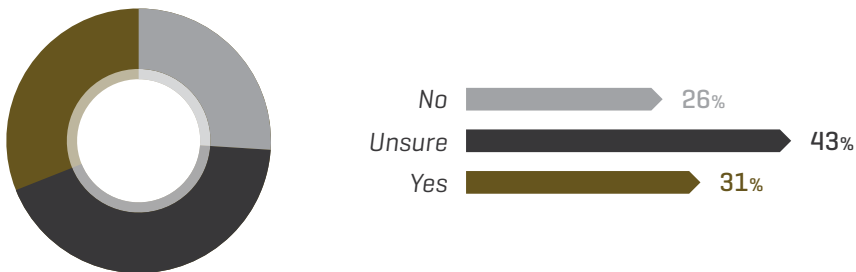
More than 75% of respondents, spanning Test Engineers and Test Managers, are definitely or possibly interested in the expert level certifications. ISTQB® is working to make training and exams available as soon as possible to meet expected demand.
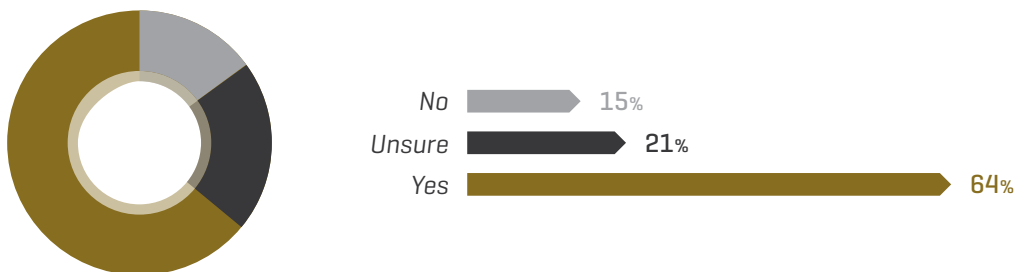
Test Managers

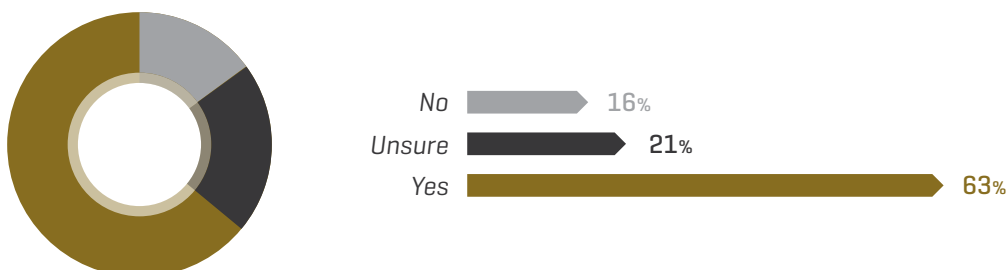|	
No	26%
Unsure	39%
Yes	35%

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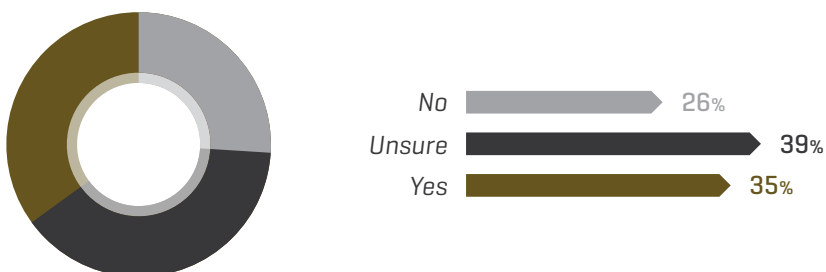
AGILE TESTING CERTIFICATION

Would you be interested in Agile testing certification?

Test Engineers
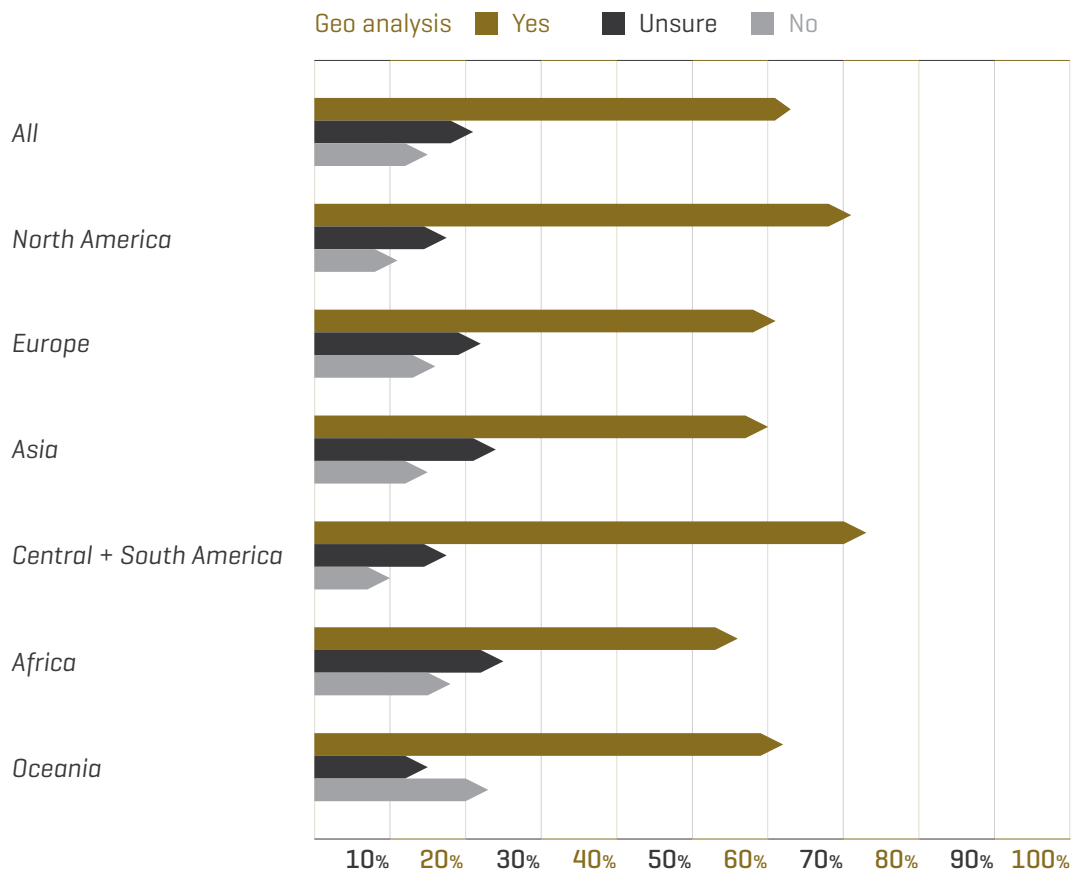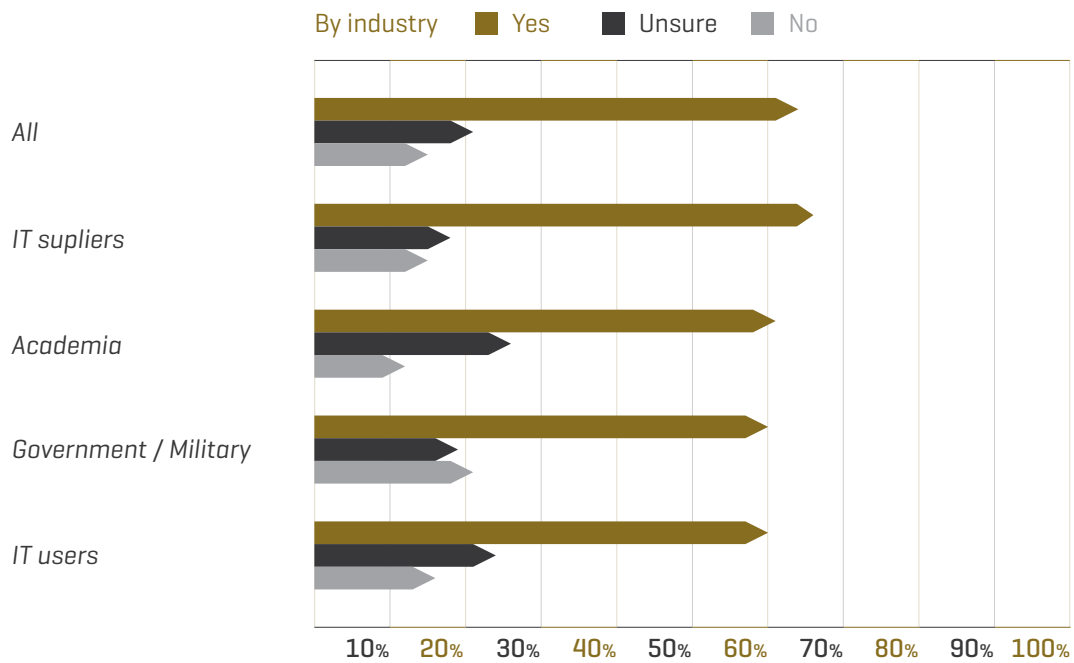
No — 15%
Unsure — 21%
Yes — 64%

Approximately 85% of the respondents are definitely of possibly interested in Agile testing certification. With the planned release in early 2014 of the Agile tester certification extension to the Foundation Level, ISTQB® is well-positioned to respond to the expected demand.

Test Managers

No — 16%
Unsure — 21%
Yes — 63%

Would you be interested in Agile testing certification?

Geo analysis ■ Yes ■ Unsure ■ No

All

North America

Europe

Asia

Central + South America

Africa

Oceania

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

By industry ■ Yes ■ Unsure ■ No

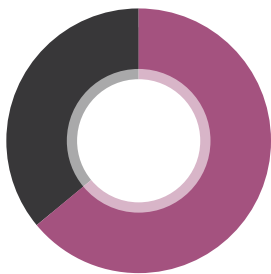|	
All	
IT supliers	
Academia	
Government / Military	
IT users	

10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

There is a strong demand for Agile certification throughout the world and across all major industries.

ACCREDITED TRAINING

Did you take a formally accredited training course before the certification exam?

**Test Engineers**

Yes 64%
No 36%

Almost two thirds of respondents indicated that they had undertaken a formally accredited training course before sitting the certification exam. As the availability of accredited training courses across all ISTQB® certification levels increases, we are expecting a corresponding increase in the number of ISTQB® certifications.

Test Managers

Yes 64%
No 36%
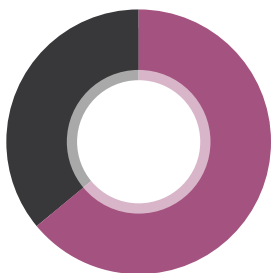
How significant do you think the training was in your certification success?

Test Engineers

Very Insignificant		4%
Insignificant		4%
Neutral		24%
Significant		38%
Very Significant		30%
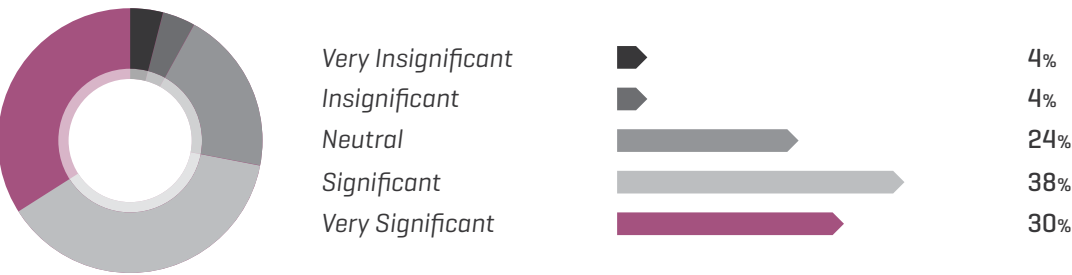
Almost 70% of the survey participants felt that formal training was a significant part of their certification success.

The ISTQB® provides strong support for training providers and accredited training will continue to be an integral part of certification success.
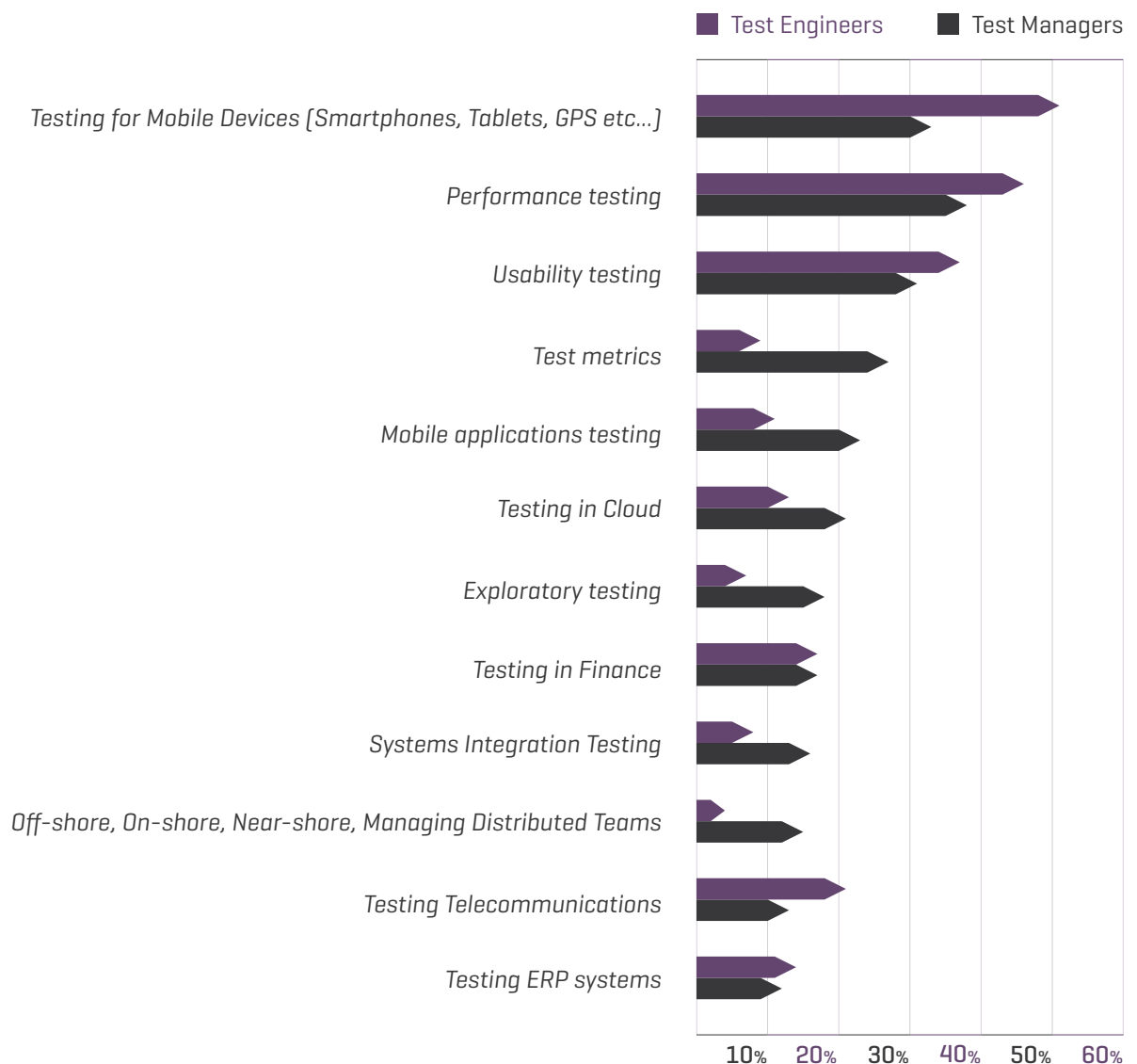
Test Managers

Very Insignificant		5%
Insignificant		6%
Neutral		23%
Significant		43%
Very Significant		23%
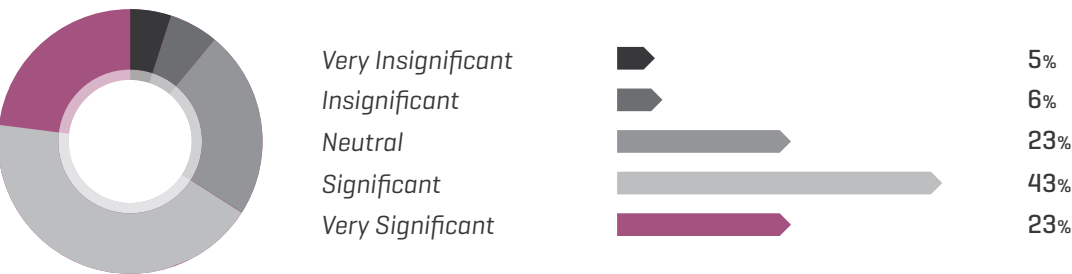
TOPICS FOR THE FUTURE

Please select at least 3 topics that you would like ISTQB®
to address in the future.

Legend: ■ Test Engineers ■ Test Managers

- Testing for Mobile Devices (Smartphones, Tablets, GPS etc...)
- Performance testing
- Usability testing
- Test metrics
- Mobile applications testing
- Testing in Cloud
- Exploratory testing
- Testing in Finance
- Systems Integration Testing
- Off-shore, On-shore, Near-shore, Managing Distributed Teams
- Testing Telecommunications
- Testing ERP systems

10% 20% 30% 40% 50% 60%

In addition to Agile Testing (which was addressed by a specific question in the survey), Performance Testing, Testing for Mobile Devices, and Usability Testing have emerged as the most important topics in the industry. This finding was supported by both Test Managers and Test Engineers.

These three mainstream topics will be considered by ISTQB® as extensions to the current syllabi.

■ Test Engineers   ■ Test Managers

Topic	
SOA testing	
Model based testing	
SAP-based applications testing	
TMMI in-depth	
Testing in safety critical domains (Avionics, Railway, Nuclear, etc...)	
Testing in Automotive	
Specification-based techniques in-depth	
Effective Reviews	
TPI-Next in-d epth	
Testing in Pharmaceutics / Medical Devices	
Component Testing	
TTCN Testing	

10% 20% 30% 40% 50% 60%

CREDITS

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