The Future of the Software Testing Profession

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Melting?

Rising?

Evils?

Is Testing Dying?

	Disagree	Agree
PM & Testers	83%	17%
Developers	33%	67%

Agenda

- Survey Findings
  - Changes
  - Methods/tools & Automation
  - Product quality
- What's Ahead?
  - The future of the software testing profession
  - What are the driving factors?
  - Observations/recommendations

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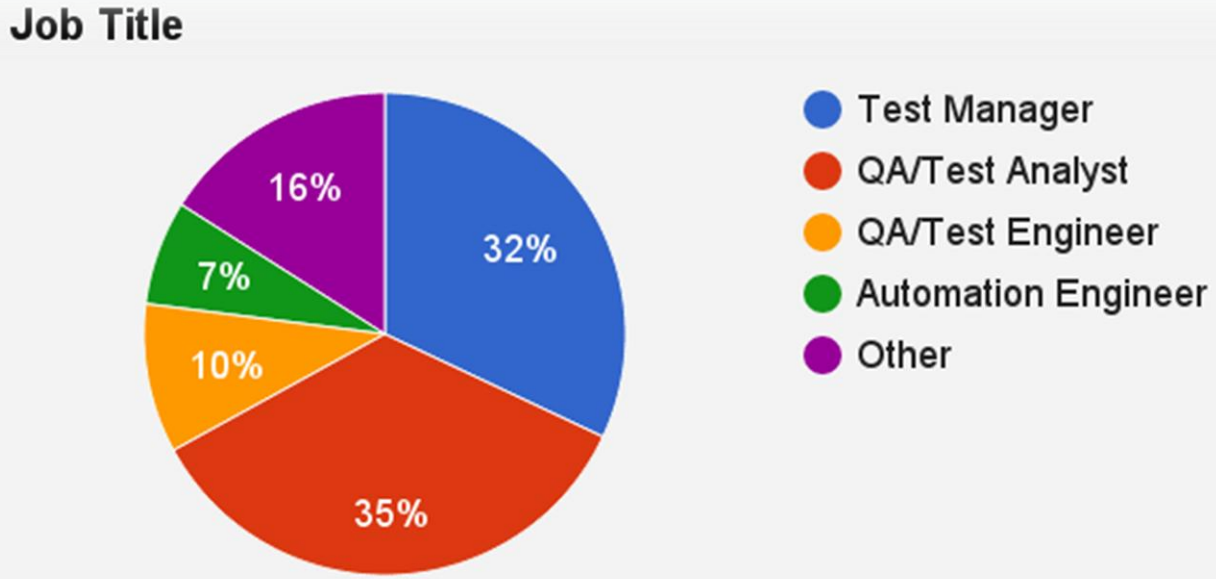
Survey Overview

33 Questions focused on:

- The testers role & work
- Changes over the last 12 months
- Key practices & techniques
- Pre & post release quality
- Opinion of the future of the tester role
- Tools used

Demographics - 495 Responses



Our Testing Roots

Why did you become a tester?

Testing is my passion

What was your first job before getting into testing?

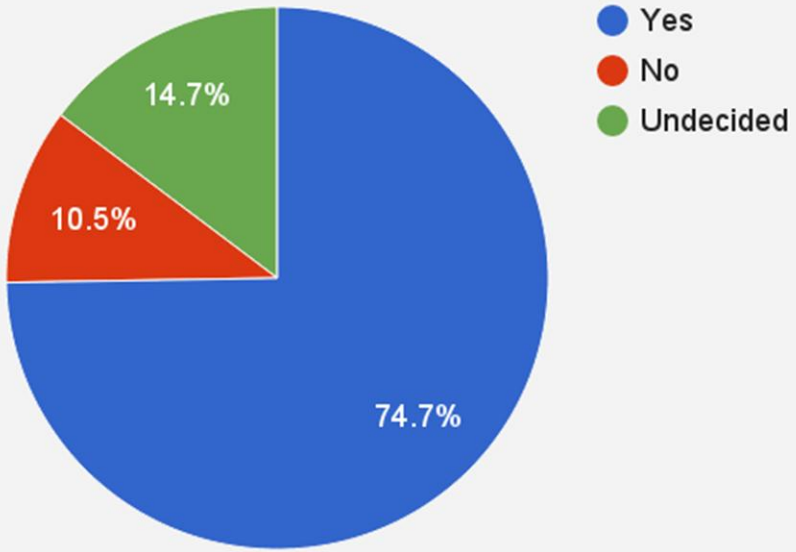
Developer/programmer – 20%

Testing was my first Job – 18%

Business user/analyst – 14%

Career Goals

Do you want to continue your career as a tester?



Dev Methods & Technologies

Primary life cycle model?

- Agile-Scrum - 34%
- Agile-Waterfall – 39%

Primary technologies tested?

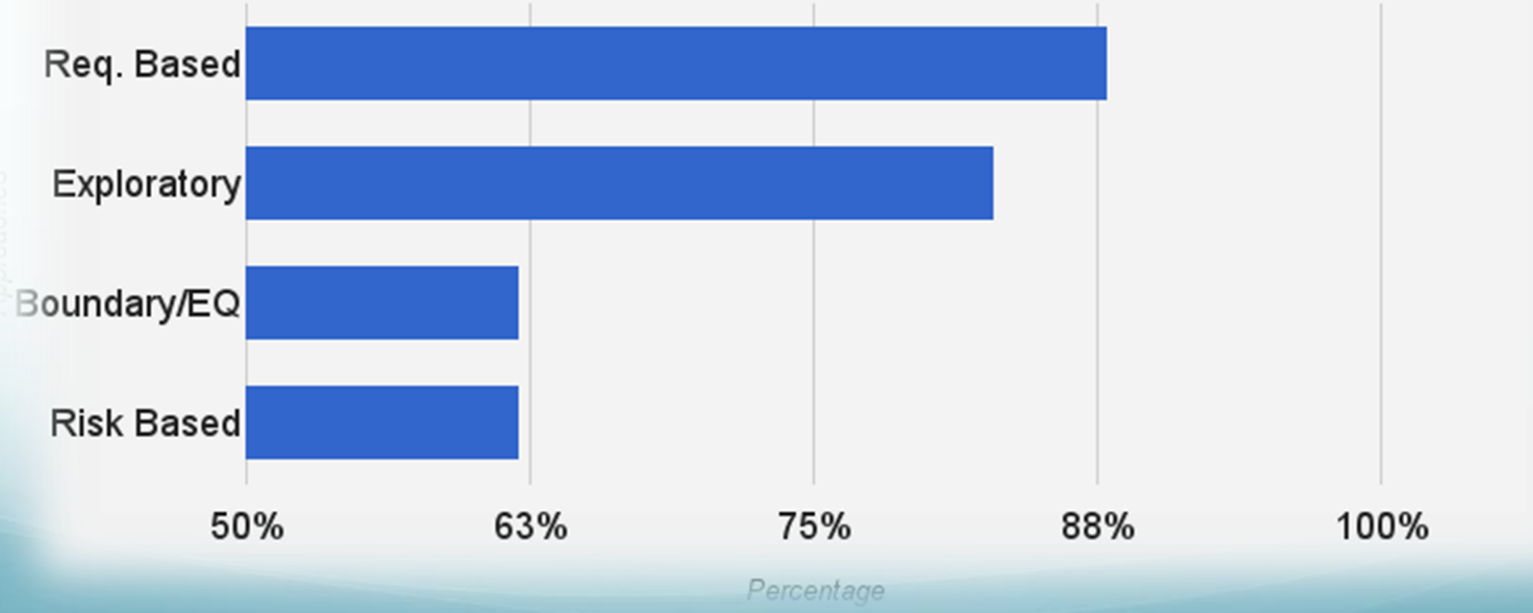
- Web Apps and Web Services

Key Practices:

- Automated Testing
- Continuous Integration, Delivery & Testing

Test Methods & Techniques

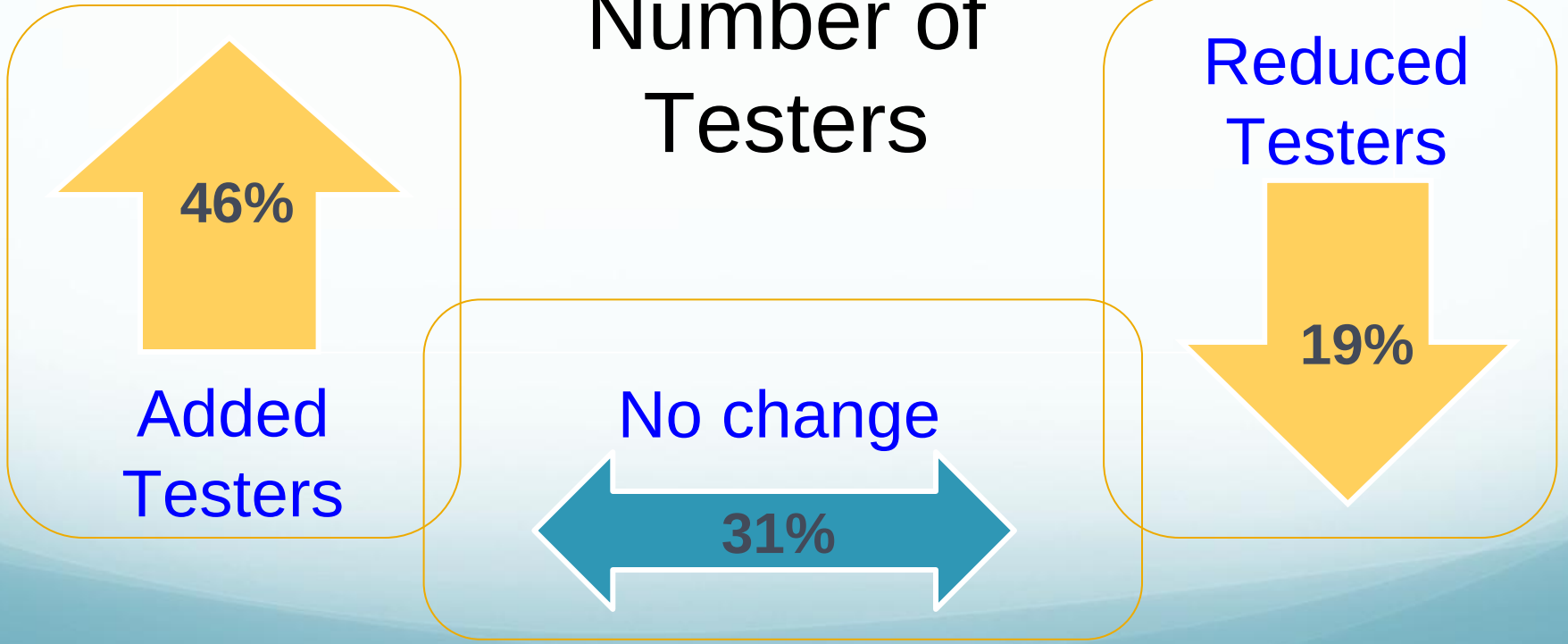
Common test approaches



How Much Automation?

Unit	Integration	System	Acceptance
Some	Limited	Some	Limited

Change in Number of Testers



Primary Changes in Testing

Has your testing role changed?

Majority - No change

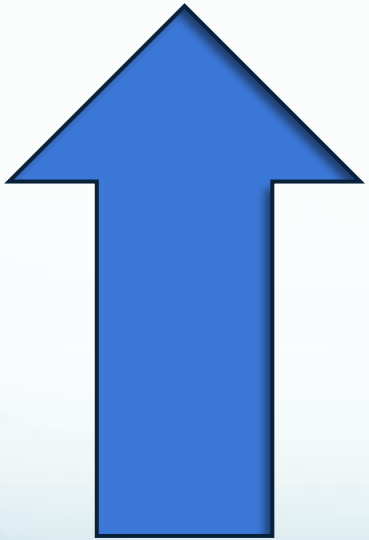
How will role change over the next 12 months?

Yes - Become more technical

Yes - Acquire more business skills

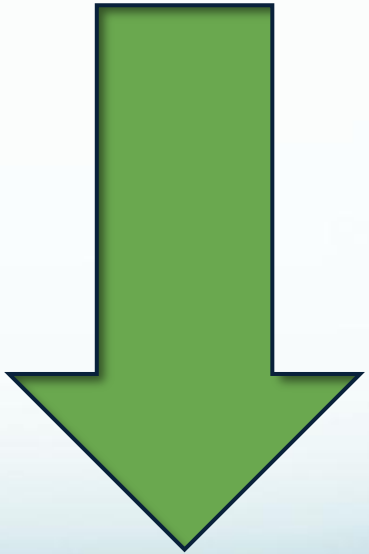
Pre- and Post Release Quality

Increased Unit Testing



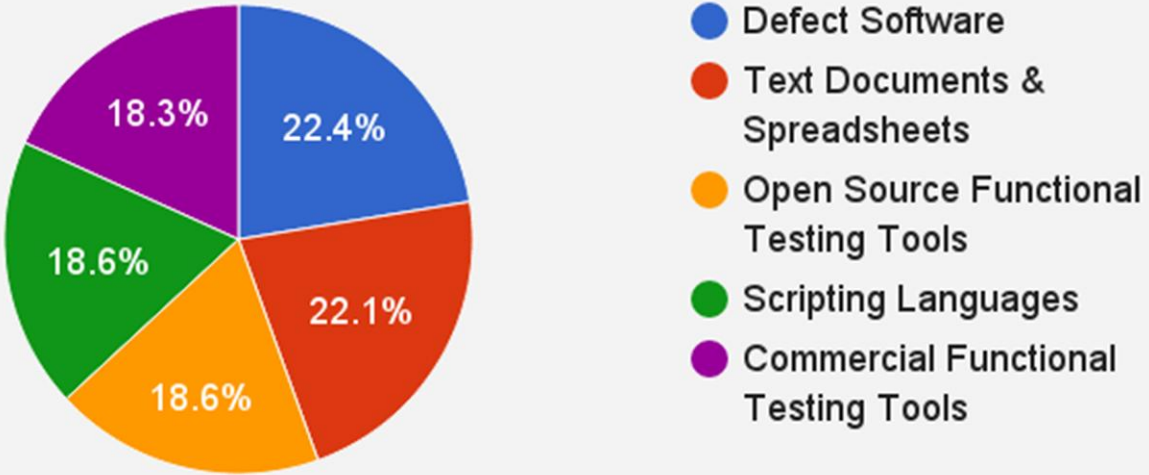
Dev Build Quality Up

Improved Testing Focus

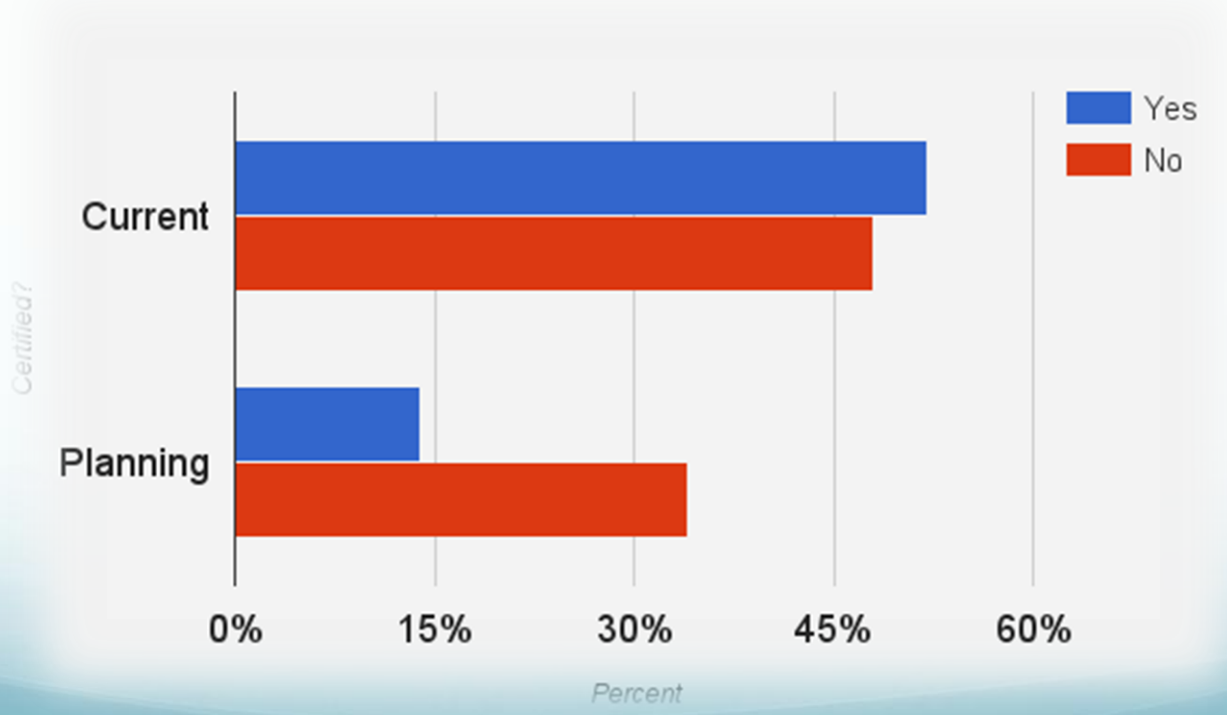


Post Release Defects Down

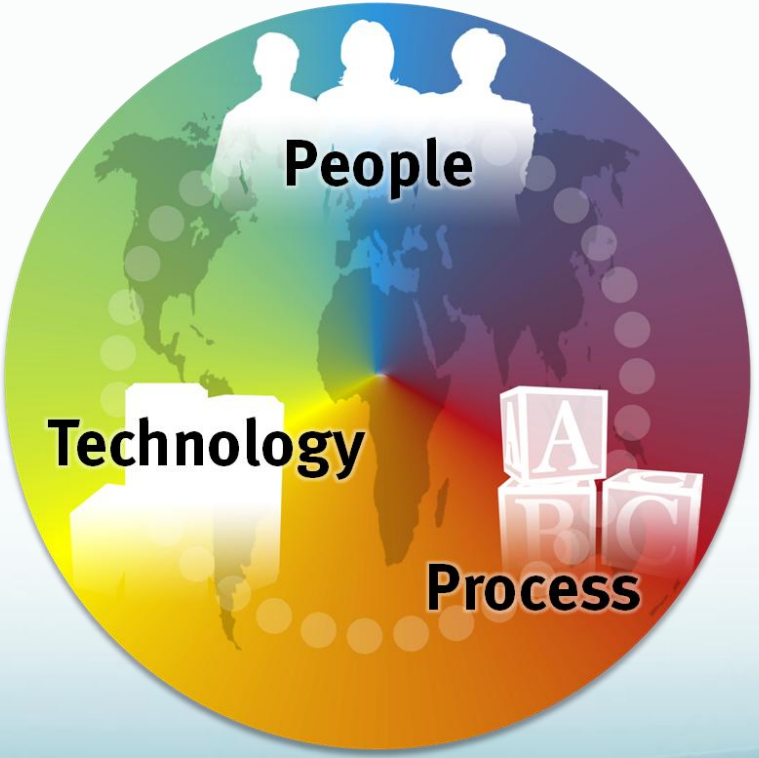
Commonly Used Tools



Current and Planned Certification



Testing - Yesterday and Today



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Truths and Myths

- Testing is a whole-team responsibility
- Testing the idea and the product is good
- Agile and other iterative methods work
- Can’t test quality in – must build it in
- Testing is about risks
- Defects abound

Truths and Myths

- Anyone can do testing
- Being a tester is a compromise
- Automation is the magic bullet
- Businesses don’t care about quality
- One approach works universally

M g?

D e?

evils

Lives

ALive

VERY Alive!

On The Future of Testing

Role of tester must be transformed: 89% Agree

- Agile changes the tester role
- Testers must become more technical

Tester should be a skilled role: 77% Agree

As long as humans are accountable for software we will need testing expertise: 91% Agree

Testing Remains Critical

Highlights of 2014 Outages

- Drop Box
- Gmail
- Google Services
- Adobe
- Icloud
- Microsoft

Bugs Still Plague Us

- Human Nature
- Increasing Complexity
- Competitive Pressure
- Poor Risks Decisions
- Improved Testing Techniques

The Next Decade - Technology

- Computing everywhere
- The Internet of Things (IoT)
- 3D printing
- Analytics
- Context-rich Systems
- Smart machines
- Cloud/client Computing
- Software defined apps
- Web scale IT
- Risk based security

The Next Decade - Testing

- Security testing
- Cloud testing
- Big data testing
- Telematics testing
- Digital commerce testing
- IoT testing
- DevOps
- Service virtualization
- Mobile testing
- Infrastructure testing

Today's Testing Scene - 2015

Key Strengths

- 40 year foundation
- Emerging methods
- Training
- Community
- Sound technology
- Standards

Key Challenges

- Knowledge
- Innovation
- Technology
- Leadership
- Transformation

QA & Test Budgets on the Rise

- Testing and QA now represent 26% of total IT budgets on average
  - Up 23% from 2013
  - Up 18% from 2012

- The share of testing budgets is expected to reach 29% by 2017.

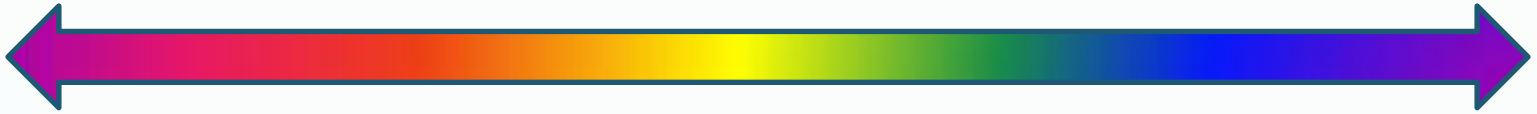
Observations/Recommendations

- The testing profession is NOT dying!
- Agile is here to stay
- Automation is an imperative
- The probability of mobile being in your future is high
- Continual transformation is a must
- There is tremendous opportunity to specialize

Four Career Paths for Testers

- Architect of Testing Guru
- Coordinator of Testing Guru
- Automator of Testing Guru
- Business User Testing Guru

A Continuum of Test Expertise

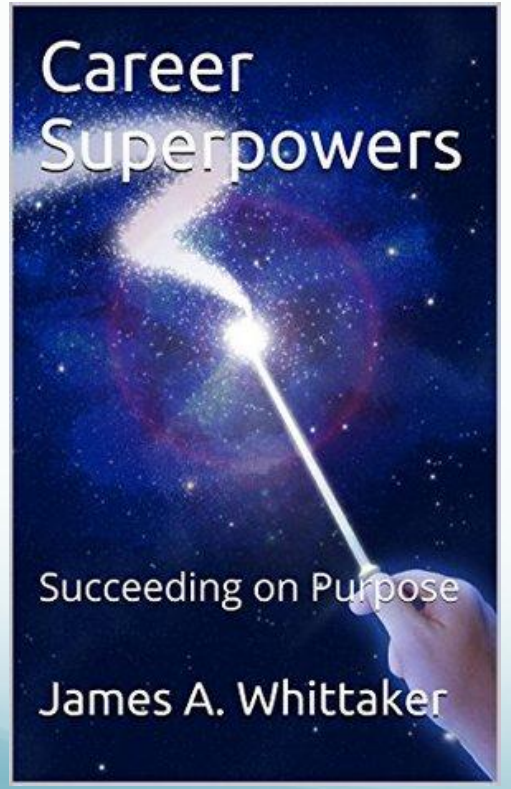


Simple	System Complexity	High
Flexible	Development Methodology	Structured
Low	Level of Independence	High
High	Customer Involvement	Low
Low	Risks	High
Less critical	Industry	Mission critical

Own Your Career as a Tester

- Keep pace with the transformation and transform!
- Chose a specialty
- Have a personal development plan & roadmap
- Have an industry focus
- Take accountability for growing your expertise
  - Creativity/innovation
  - Leadership
  - Results

Invest in Superpowers



- Ambition
- Passion
- Specialization
- Learning
- Derivation
- Creativity
- Interesting
- Storytelling
- Leadership

Closing Thought

“As long as people are accountable for software development there will be a need for skilled testing roles…”

M.D.Sowers

Thank You

Acknowlegements

With sincere thanks and appreciation to all who have contributed:

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- Dorothy Graham, Jon Hagar, Matt Heusser, James Whittaker
- Wayne Middleton, Heather Shanholtzer, Stasi Richmond
- Lee Copland, Rick Craig, Dale Perry, Rob Sabourin

Take the Survey

Add your input to our growing body of knowledge.

Visit
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to complete the State of the Testing Profession survey.