



# Workforce Competency and Skills Gaps

Presented at:



December 13, 2018



THE UNIVERSITY OF  
**MEMPHIS**<sup>®</sup>

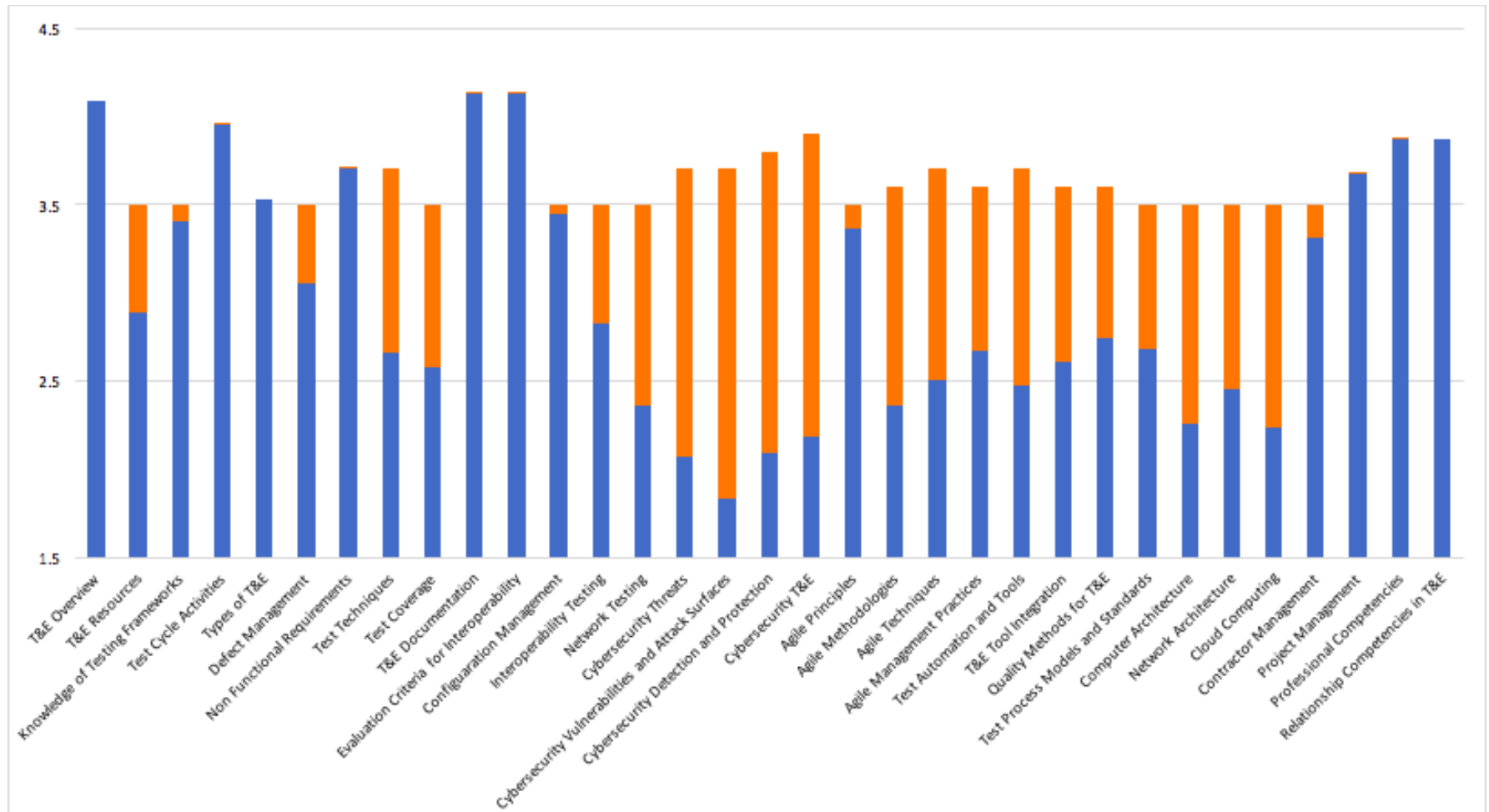
# Workforce Competency

- Focus on managing organization's bundle of skills and competencies (S&C)
  - Not individual's qualifications and work performance
- Understand current S&C profile
  - Analysis of your workforce professionals
  - Assess across core knowledge areas for modern T&E
  - Knowledge areas should be customized through site visits with T&E leadership combined with scientific foundations and industry best practices
  - Survey instrument should be created and administered

# Skills and Competencies Measures

T&E Background	Standards Conformance for Developmental T&E	Interoperability T&E	Cybersecurity T&E	Agile T&E	Operational T&E Analysis and Tools	Computer Systems	Professionalism in T&E
T&E Overview	Knowledge of Testing Frameworks	Evaluation Criteria for Interoperability	Cybersecurity Threats	Agile Principles	Test Automation and Tools	Computer Architecture	Contractor Management
Resources T&E	Test Cycle Activities	Configuration Management	Cybersecurity Vulnerabilities and Attack Surfaces	Agile Methodologies	T&E Tool Integration	Network Architecture	Project Management
	Types of T&E	Interoperability Testing	Cybersecurity Detection and Protection	Agile Techniques	Quality Methods for T&E	Cloud Computing	Professional Competencies
	Defect Management	Network Testing	Cybersecurity T&E	Agile Management Practices	Test Process Models and Standards		Relationship Competencies in T&E
	Non-Functional Requirements						
	Test Techniques						
	Test Coverage						
	T&E Documentation						

# Projected Future T&E S&C Profile to Fill Skills Gaps



# Manage Workforce Skills and Competencies

- Know where your workforce ranks for overall T&E S&C
- Raise the benchmark short-term and beyond that long-term
- Achieve this through:
  - Training programs targeted to raise the overall S&C
  - Hiring of a skilled workforce in critical areas
  - Skills-based work re-balancing
- Equips your T&E workforce with S&C required to serve your users of the future

# ***Expanding the Science of Testing***

Academic scholars and industry partners

An interdisciplinary program through the collaboration of Computer Science, Business Information and Technology, and Computer Engineering scholars at the FedEx Institute of Technology

**Contact:**

**Dr. Robin Poston**

**[step@memphis.edu](mailto:step@memphis.edu)**

**901-678-2000**