THE SECURITY STANDARD

Adapting Enterprise Security to New Realities, Threats and Endpoints

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Produced by

CSO

Forecast for Info Security Personnel
The Good and Bad
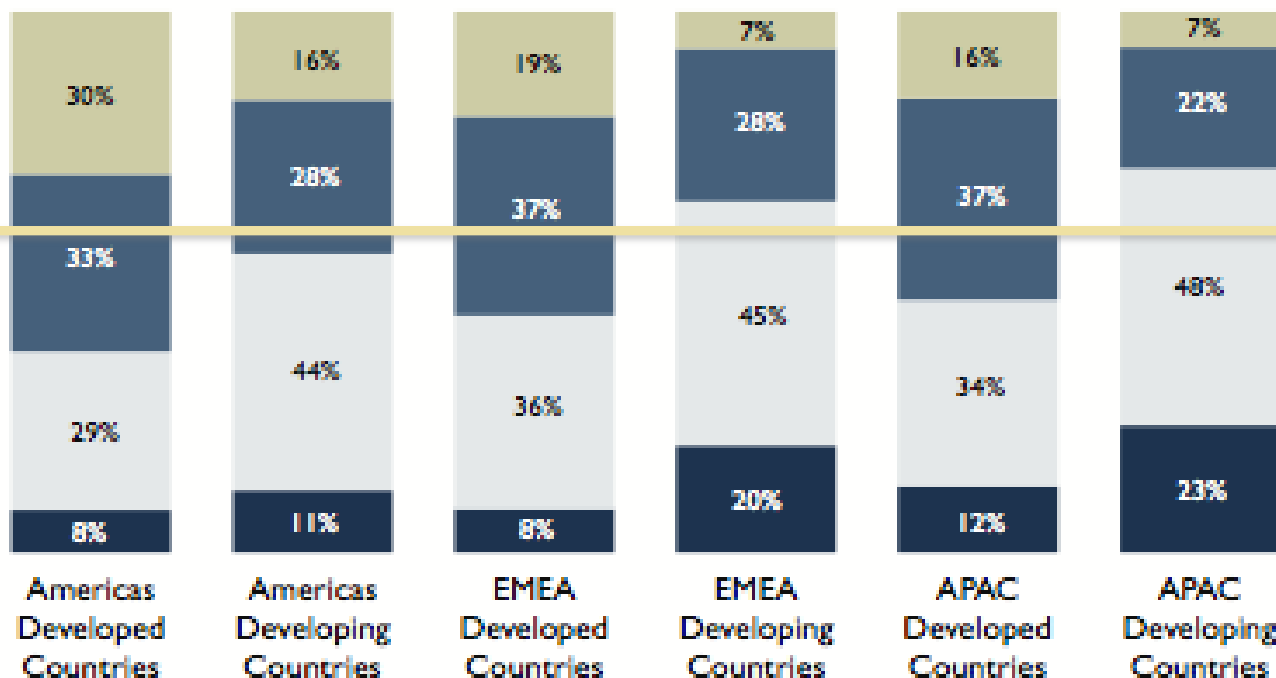## Lots of opportunities means qualified staff is harder to hire and retain

	2010	2011	2012	2013	2014	2015	2010-2015 CAGR
Americas	920,845	1,058,972	1,214,641	1,393,193	1,570,128	1,785,236	14.2%
EMEA	617,271	703,689	796,576	897,741	1,014,448	1,148,355	13.2%
APAC	748,348	830,666	924,531	1,038,248	1,168,029	1,310,529	11.9%
Total	2,286,464	2,593,327	2,935,748	3,329,183	3,752,605	4,244,120	13.2%

2011 Staff Maturity Study

The Issue: Relative immaturity of Information Security Staff – Experience Difficult to Find
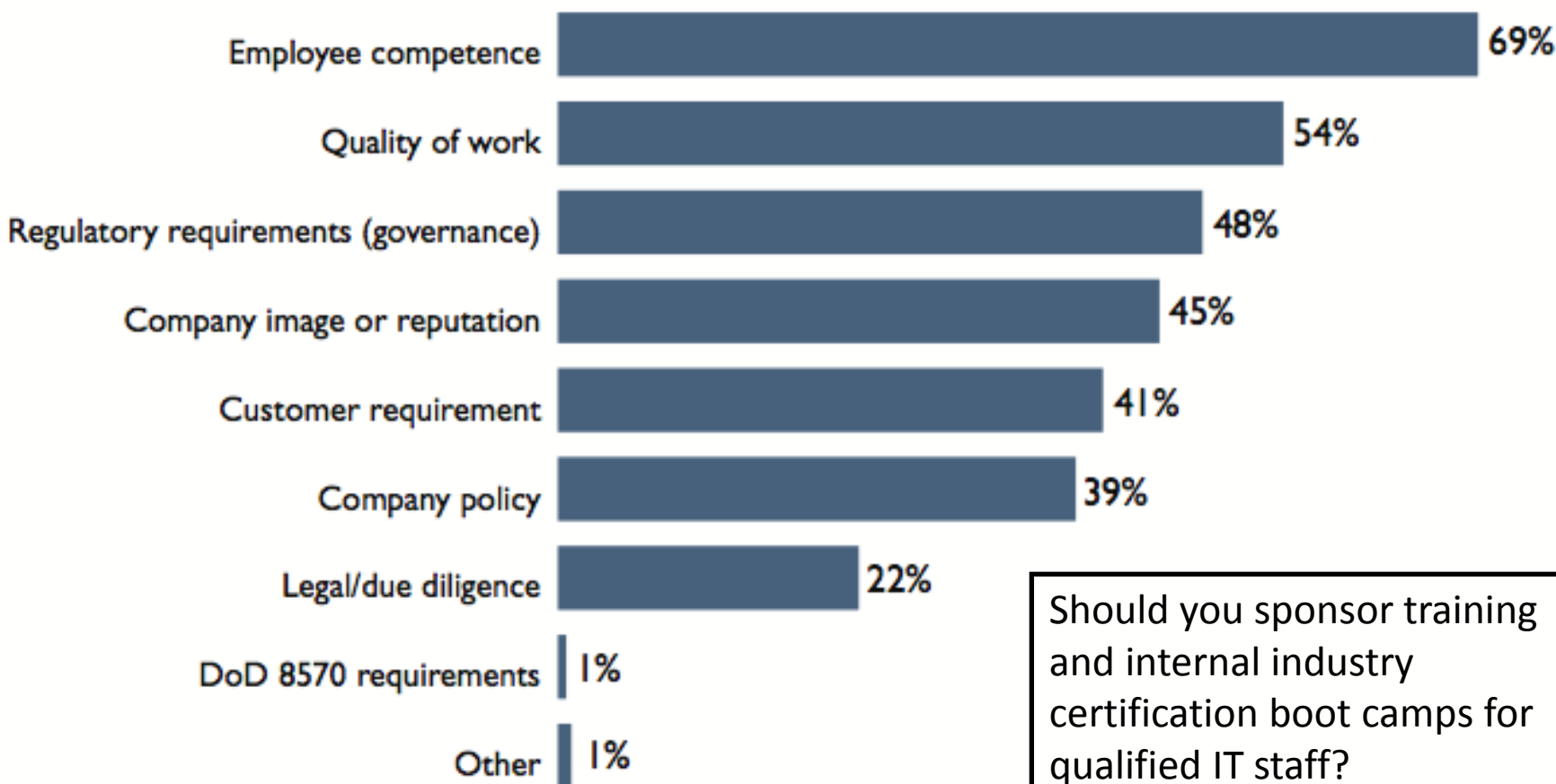

Legend: Less than five years | Five to nine years | Ten to 14 years | Fifteen years or more

50% have less than 9 years experience

	Americas Developed Countries	Americas Developing Countries	EMEA Developed Countries	EMEA Developing Countries	APAC Developed Countries	APAC Developing Countries
Fifteen years or more	30%	16%	19%	7%	16%	7%
Ten to 14 years	33%	28%	37%	28%	37%	22%
Five to nine years	29%	44%	36%	45%	34%	48%
Less than five years	8%	11%	8%	20%	12%	23%

Source: Frost & Sullivan Survey for ISC2

Do Employers Hire Certified Individuals?
Prerequisite of the Future?

Category	Percentage
Employee competence	69%
Quality of work	54%
Regulatory requirements (governance)	48%
Company image or reputation	45%
Customer requirement	41%
Company policy	39%
Legal/due diligence	22%
DoD 8570 requirements	1%
Other	1%

Should you sponsor training and internal industry certification boot camps for qualified IT staff?

Source: Frost & Sullivan Survey for ISC2

Must develop strategies to build the pipeline

- Look Internally
- Look Externally – Non Traditional
  - Teachers, ParaLegal, Engineers
- Develop internal training opportunities and open up attendance to those interested
- Bring in speakers to build enthusiasm (FBI, etc)
- Develop a competency matrix so candidates and staff know what they must know to advance or earn a position
- Interns, Temps, Summer Help!

Identify Competencies

Start Simple Using the Levels of
Manage, Design, Implement, Evaluate

- **IT Security Analyst**
  - The IT Security Analyst concentrates on protecting information and information systems from unauthorized access, use, disclosure, disruption, modification, or destruction to provide confidentiality, integrity, and availability.

- **Competencies:**
  - Data Security: *Manage, Design, Evaluate*
  - Enterprise Continuity: *Evaluate*
  - Incident Management: *Design, Evaluate*
  - IT Security Training and Awareness: *Design, Implement, Evaluate*
  - Personnel Security: *Design, Evaluate*
  - Physical and Environmental Security: *Design, Evaluate*
  - Regulatory and Standards Compliance: *Implement*
  - Security Risk Management: *Design, Implement, Evaluate*

- **Build training programs around each competency**

Market Drivers Summary

- Consumerization has end-users bringing technology to the enterprise instead of the opposite; information security professionals should work to securely embrace these new technologies instead of acting as roadblocks.

- Cloud computing and software development are areas of information security that require new skills, not just incremental advances.

- Compliance is driving organizational behavior from changes in spending levels to shifts in accountability, to requirements in new skill sets.

- As emerging sub-markets, Latin America, Africa, and Oceania offer attractive employment incentives and opportunities for information security professionals over the next five years.

- Certifications will continue to be an important differentiator as the number of professionals necessary to effectively secure organizations continues to increase.

Staff Strategies Summary

- Internal Development Plans for Employees to Train and Retain Info Security Staff (Essential Body of Knowledge Matrix)
- Develop an internal training program for people who want to learn about Info Security, build enthusiasm
- Leverage Intern and Summer Temp programs to "fill the pipeline" with interested candidates
- Sponsor programs and funding for schools with Info Security Programs.
- Advisory Boards, Public Outreach, Get Involved, Network
  - Schools, ISSA, InfraGard, etc
- National Initiative for Cybersecurity Education (NICE) program from NIST

Would You Rather be a Tree Mover or a Line Painter?

Line Painters	Tree Movers
Focus on writing rules	Focus on changing behavior
Comfortable with the status quo	Committed to Operational Excellence
Embrace and feed the system	Seek system waste and eliminate
Analysis Paralysis	Define and Act
Say No	Enable business to operate securely

Would It Affect Your Choice to Stay or Go?

Security, The Next Generation

Start Them Young