



University of Bahrain  
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# Setting the scene

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# Cybersecurity Skills Crisis

## Too Many Threats

 **62%**  
INCREASE  
IN BREACHES  
IN 2013<sup>1</sup>

**1 IN 5**   
ORGANIZATIONS  
HAVE EXPERIENCED  
AN APT ATTACK<sup>4</sup>

**US \$3  
TRILLION**  
TOTAL GLOBAL  
IMPACT OF  
CYBERCRIME<sup>3</sup>

 **7½ MONTHS**  
IS THE AVERAGE TIME  
AN ADVANCED THREAT  
GOES UNNOTICED ON  
VICTIM'S NETWORK<sup>2</sup>

**2.5  
BILLION**   
EXPOSED RECORDS AS  
A RESULT OF A DATA BREACH  
IN THE PAST 5 YEARS<sup>5</sup>

## Too Few Professionals

 **62%**  
OF ORGANIZATIONS  
HAVE NOT INCREASED  
SECURITY TRAINING  
IN 2014<sup>6</sup>

 **1 OUT OF 3**  
SECURITY PROS ARE  
NOT FAMILIAR WITH  
ADVANCED PERSISTENT  
THREATS<sup>7</sup>

 **<2.4%**  
GRADUATING STUDENTS  
HOLD COMPUTER  
SCIENCE DEGREES<sup>8</sup>

 **1 MILLION**  
UNFILLED SECURITY  
JOBS WORLDWIDE<sup>9</sup>

**83%**   
OF ENTERPRISES CURRENTLY  
LACK THE RIGHT SKILLS AND  
HUMAN RESOURCES TO PROTECT  
THEIR IT ASSETS<sup>10</sup>

Enterprises are under siege from  
**a rising volume of cyberattacks.**

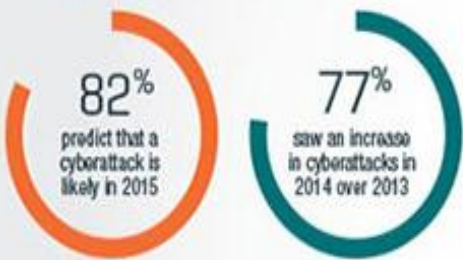
At the same time, the global demand for skilled professionals sharply outpaces supply. Unless this gap is closed, organizations will continue to face major risk. Comprehensive educational and networking resources are required to meet the needs of everyone from entry-level practitioners to seasoned professionals.

**SOURCES:** 1. 2014 Internet Security Threat Report, Volume 19, Symantec, April 2014; 2. M-Trends 2014: Attack the Security Gap, Mandiant, April 2014; 3. Increased Cyber Security Can Save Global Economy Trillions, McKinsey/World Economic Forum, January 2014; 4. ISACA's 2014 APT Study, ISACA, April 2014; 5. An Executive's Guide to 2013 Data Breach Trends, Risk Based Security/Open Security Foundation, February 2014; 6. ISACA's 2014 APT Study, ISACA, April 2014; 7. ISACA's 2014 APT Study, ISACA, April 2014; 8. Code.org, February 2014; 9. 2014 Cisco Annual Security Report, Cisco, January 2014; 10. Cybersecurity Skills Haves and Have Nots, ESG, March 2014



1

### THE ROLE IS NEEDED



of enterprises provide employees with mobile devices

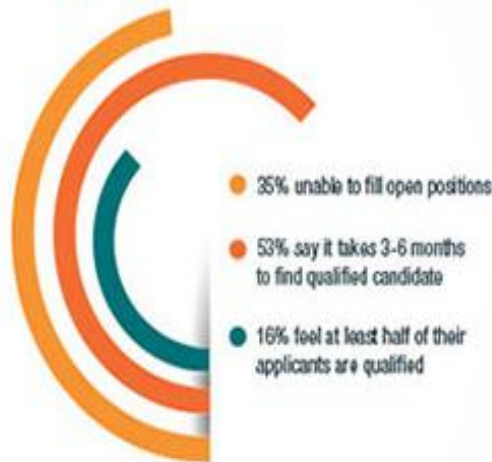
91% of lost physical assets are mobile devices

The most frequently successful cyberattacks:



2

### FILLING IT IS DIFFICULT



LESS THAN HALF

feel their security teams are able to detect and respond to complex incidents



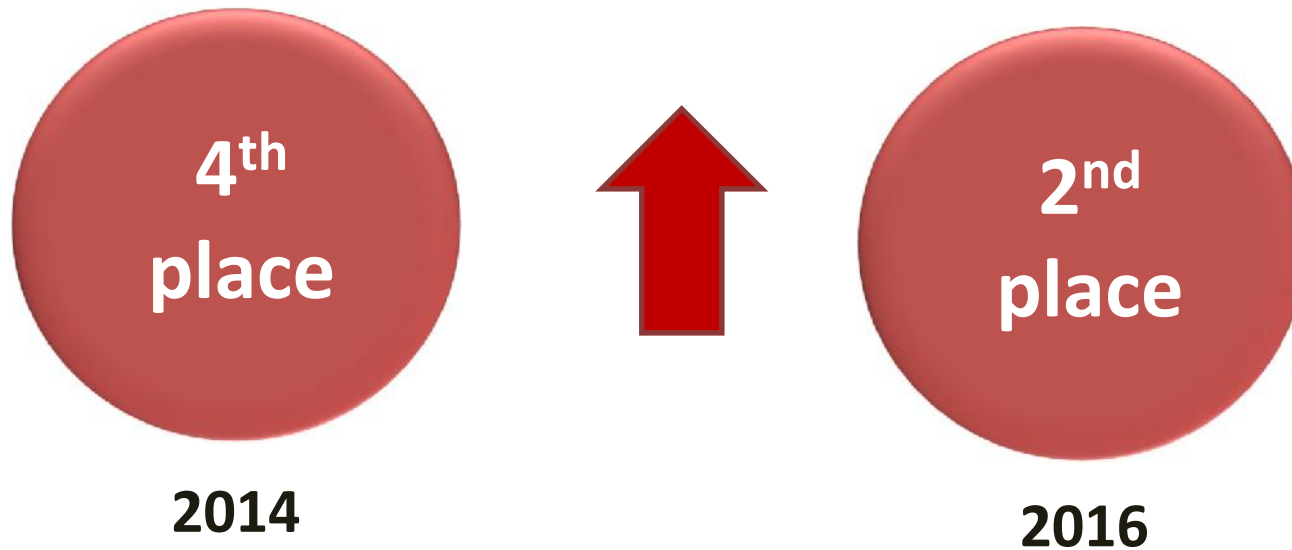
3

### THE IDEAL PROFESSIONAL



SOURCE: State of Cybersecurity: Implications for 2015, an ISACA and RSA Conference Survey  
[www.isaca.org/state-of-cybersecurity-2015](http://www.isaca.org/state-of-cybersecurity-2015)  
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# Cyber crime moves up the order



PWC – Global Economic Crime Survey, 2016

# Top 10 Threats – Business Continuity Institute



Source: Business Continuity Institute 2016