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Secure.

Capitalizing on
Collective Intelligence

Security: The Hardest Career

(and 3 patterns of those who don't find it so hard)

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An advertisement for the InformationWeek iPad app. It features a tablet displaying the app's interface with various news articles. To the right of the tablet, the text reads "What you need to know. Now." followed by the "InformationWeek" logo in large red letters. Below the logo, it says "Now Available on the iPad™". On the far right, there is a badge that says "Available on the App Store".

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Closing The Cybersecurity Gap In Government

In the face of unrelenting threats to systems and networks, federal agencies must find ways to attract qualified workers and develop new skills internally.

By [J. Nicholas Hoover](#)  InformationWeek

August 30, 2010 12:00 AM

Across the federal government, agencies are grappling with a shortage of cybersecurity pros who have the skills to protect their computers and networks from relentless, and increasingly dangerous, forms of attack. The Department of Homeland Security and the Air Force received authority to expedite the hiring of almost 1,700 cybersecurity pros over the next two years, but fast-track hiring is a stopgap solution. The long-term answer requires new training programs and better ways of attracting and retaining employees with the sought-after skills.

At a recent cybersecurity workforce conference at the National Institute for Standards and Technology's offices in Gaithersburg, Md., chief information security officers and other government IT managers identified a range of related issues: a confusing morass of certifications; HR processes that identify candidates based on buzzwords, not bona fide experience; drawn-out hiring and security-clearance processes; federal mandates that push unqualified people to the front of the hiring line; and competition with the private sector for job candidates.

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Sponsors

The History
and Future of
Cyber Power

Cybersecurity

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Government, Military Face Severe Shortage Of Cybersecurity Experts

August 2011

By Eric Beidel and Stew Magnuson



"It takes a network to defeat a network," military leaders were fond of saying as they went after insurgents in Iraq. But there are other enemies out there who operate unseen and are attacking the United States. Cyberspies, hackers, and others using the Internet for nefarious purposes also operate in networks.

China, Iran and Russia host untold numbers of hackers. Whether they are state-sponsored or not is a matter of conjecture, but what is known is that they are relentless. U.S. military and civilian agencies are attempting to counter nonstop computer attacks and intrusions.

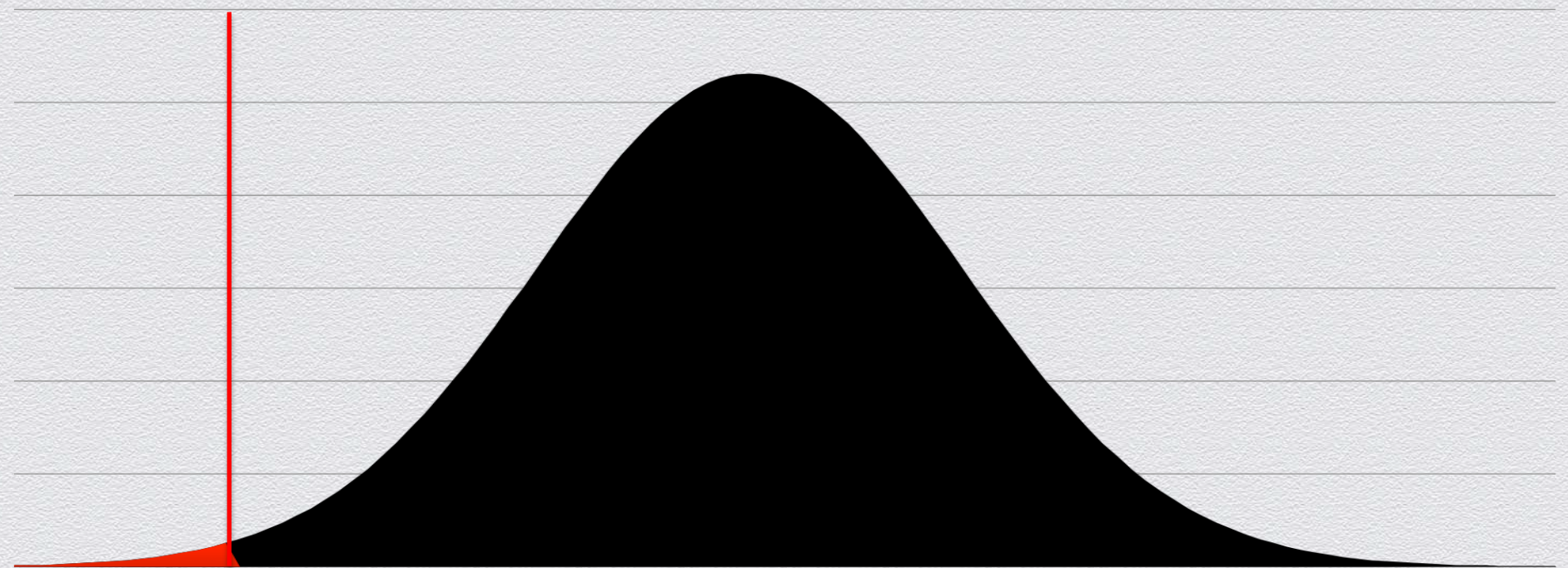
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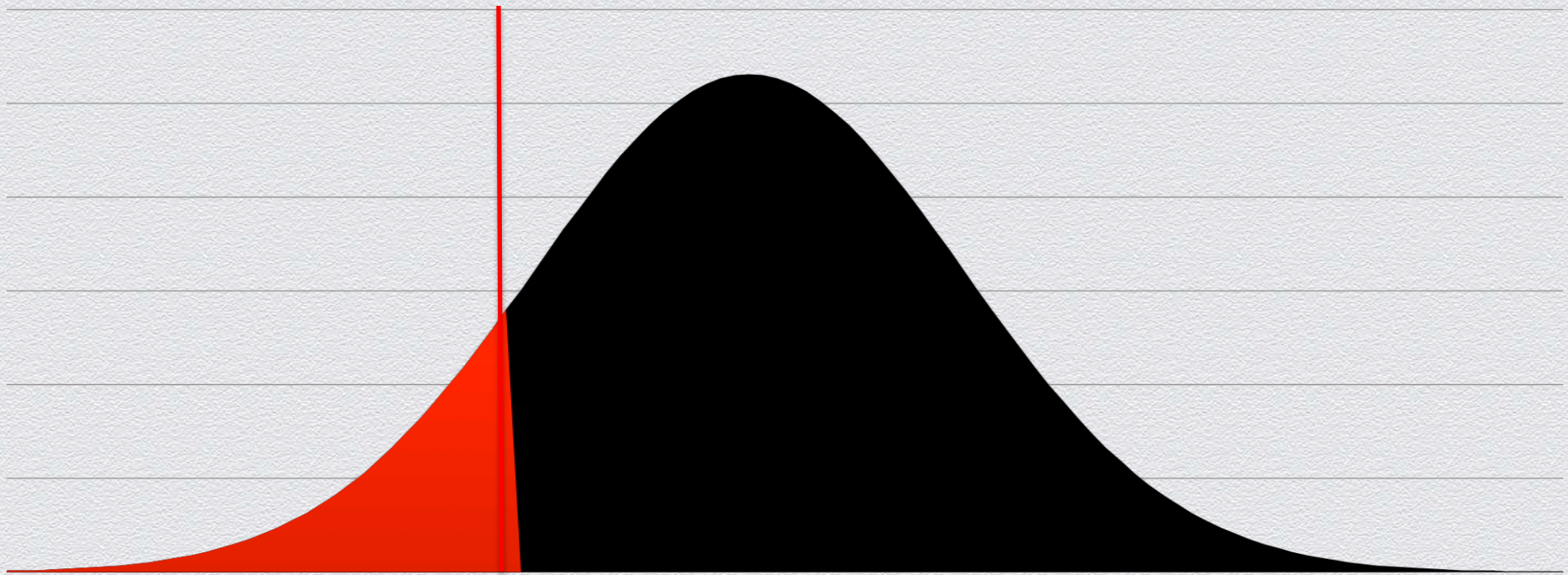


Constant Evolution

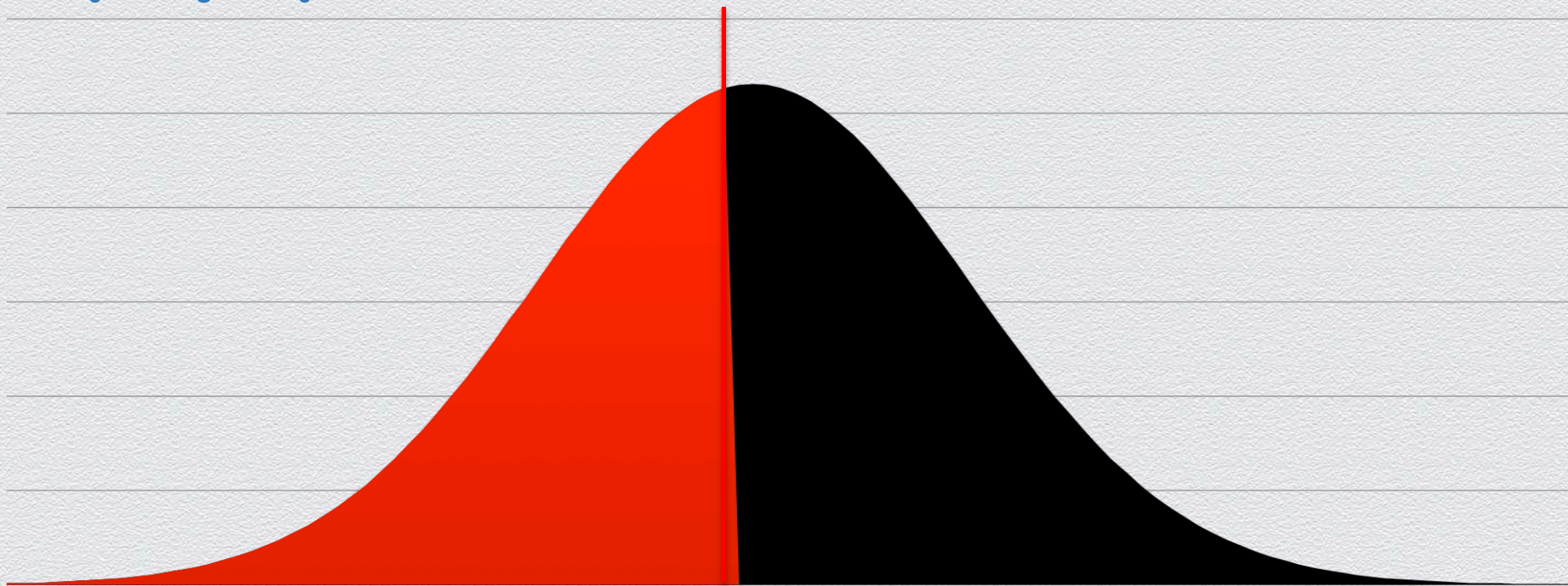
Innovators



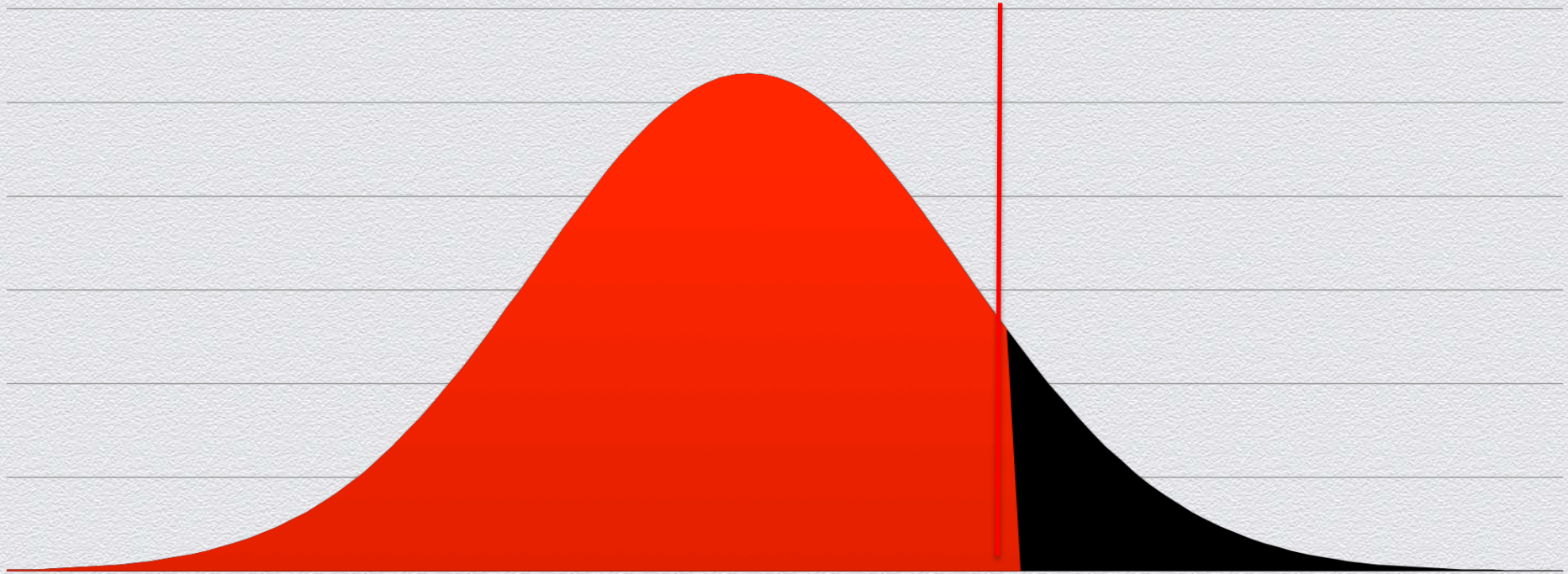
Early Adopters



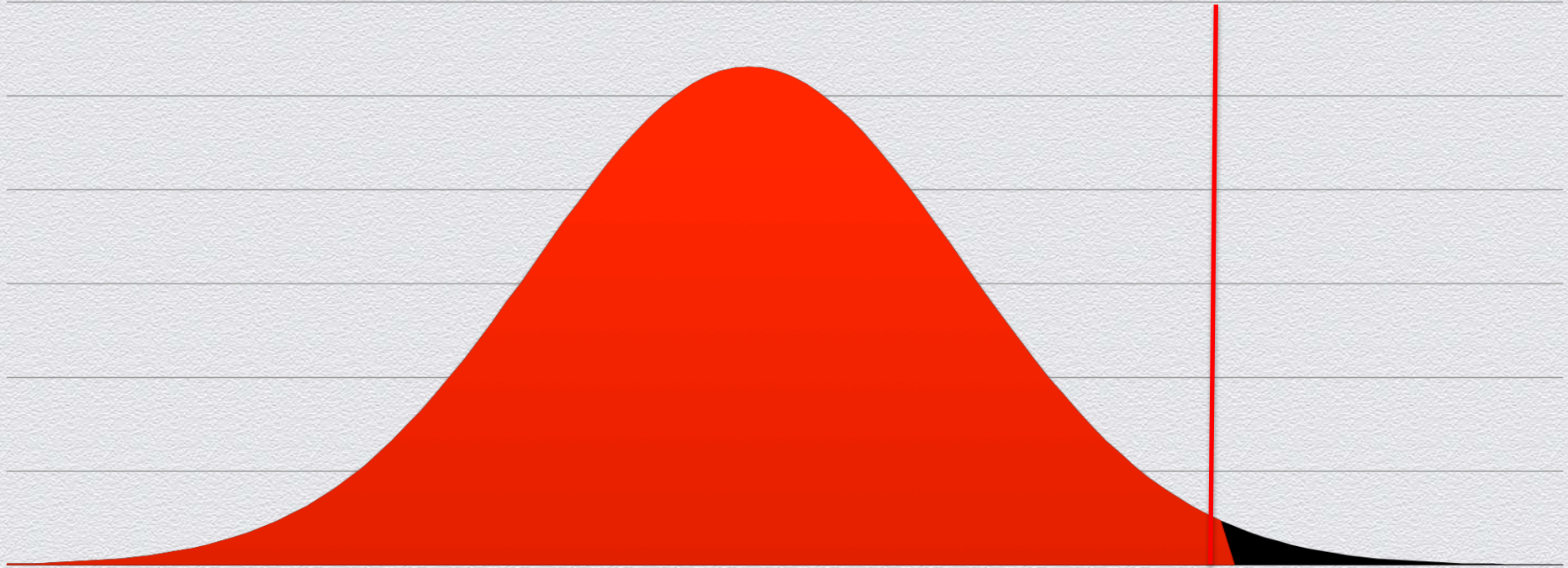
Early Majority



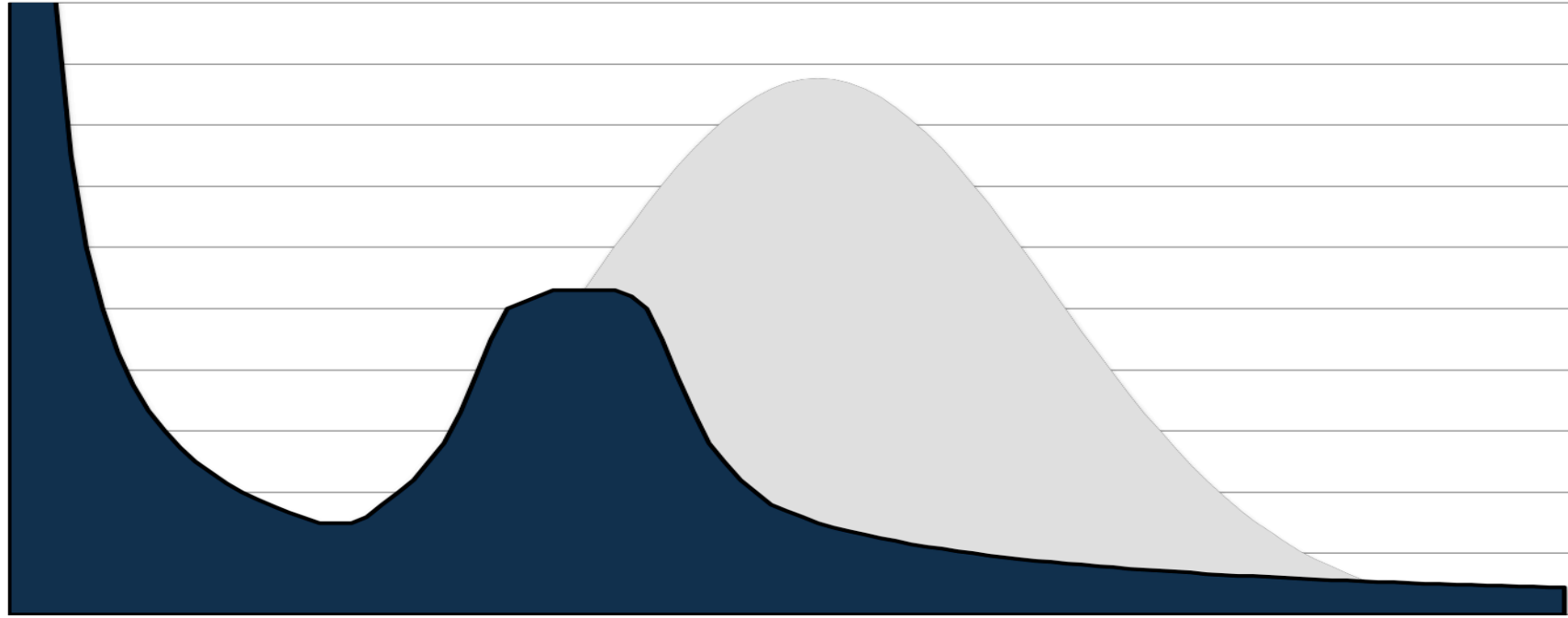
Late Majority



Laggards



Vulnerability Distribution



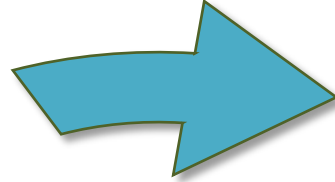
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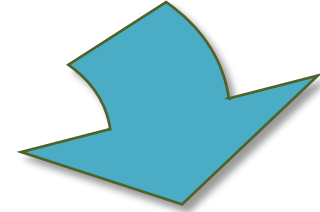


Patterns

**Human /
Organization**

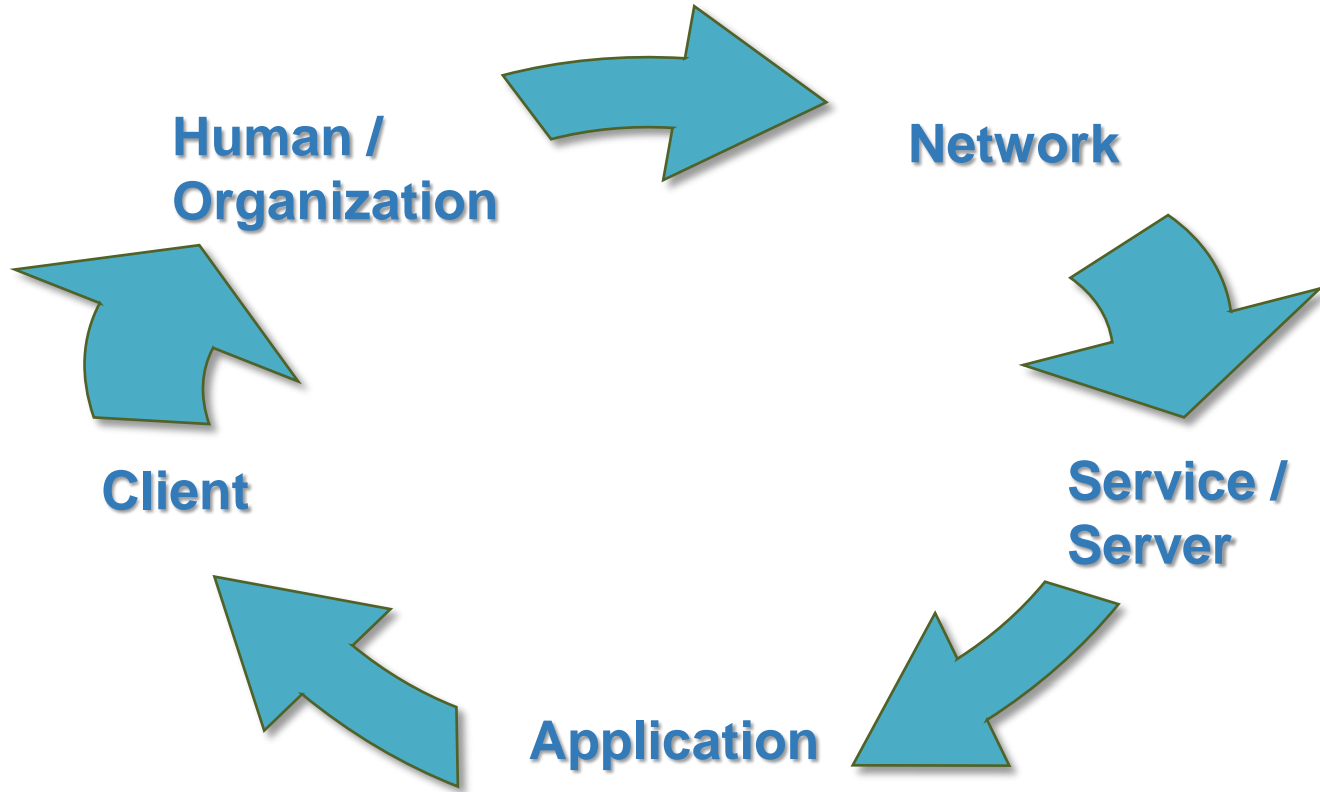


Network



**Service /
Server**





WiFi Security Data Extrusion APT

Web Application Application Whitelisting

Security Phishing

Vulnerability Management Mobile Apps

IDS Database Security

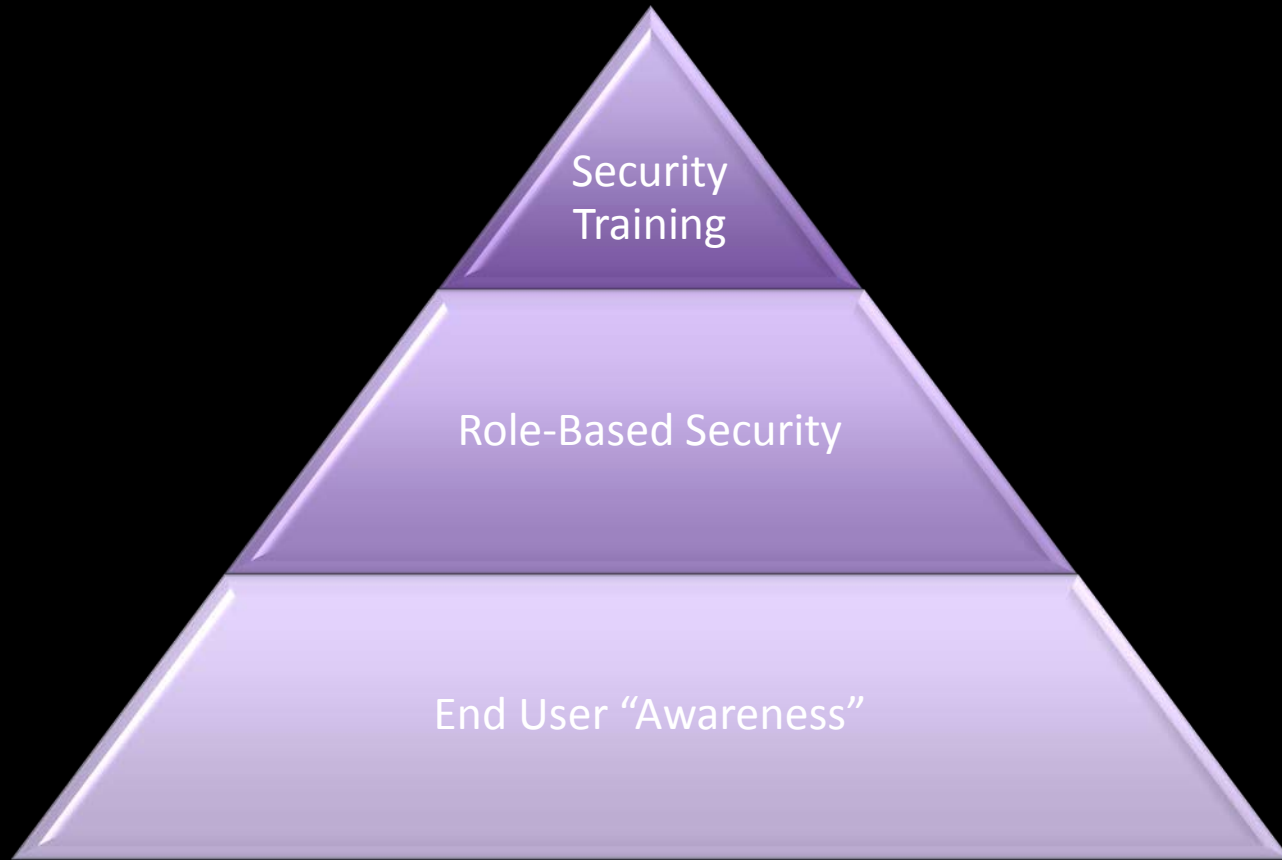
IPS Endpoint Security Spear Phishing

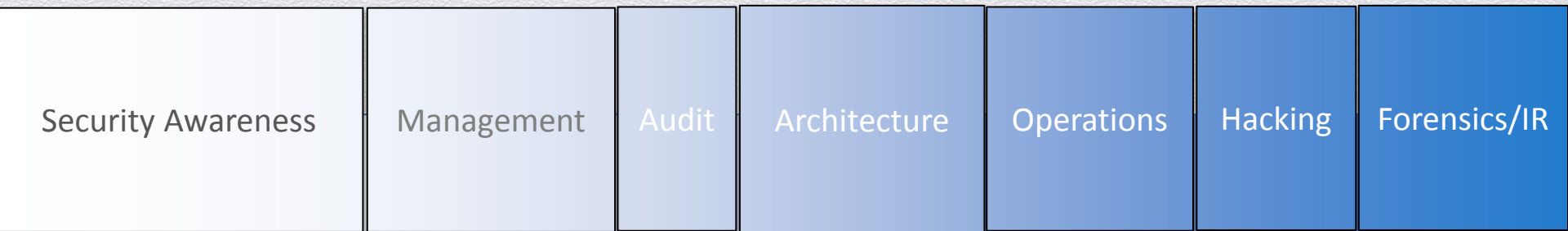
Secure Coding GRC

/ SDLC BYOD









Security Awareness

Management

Audit

Architecture

Operations

Hacking

Forensics/IR

Least Technical

Most Technical



#RSAC



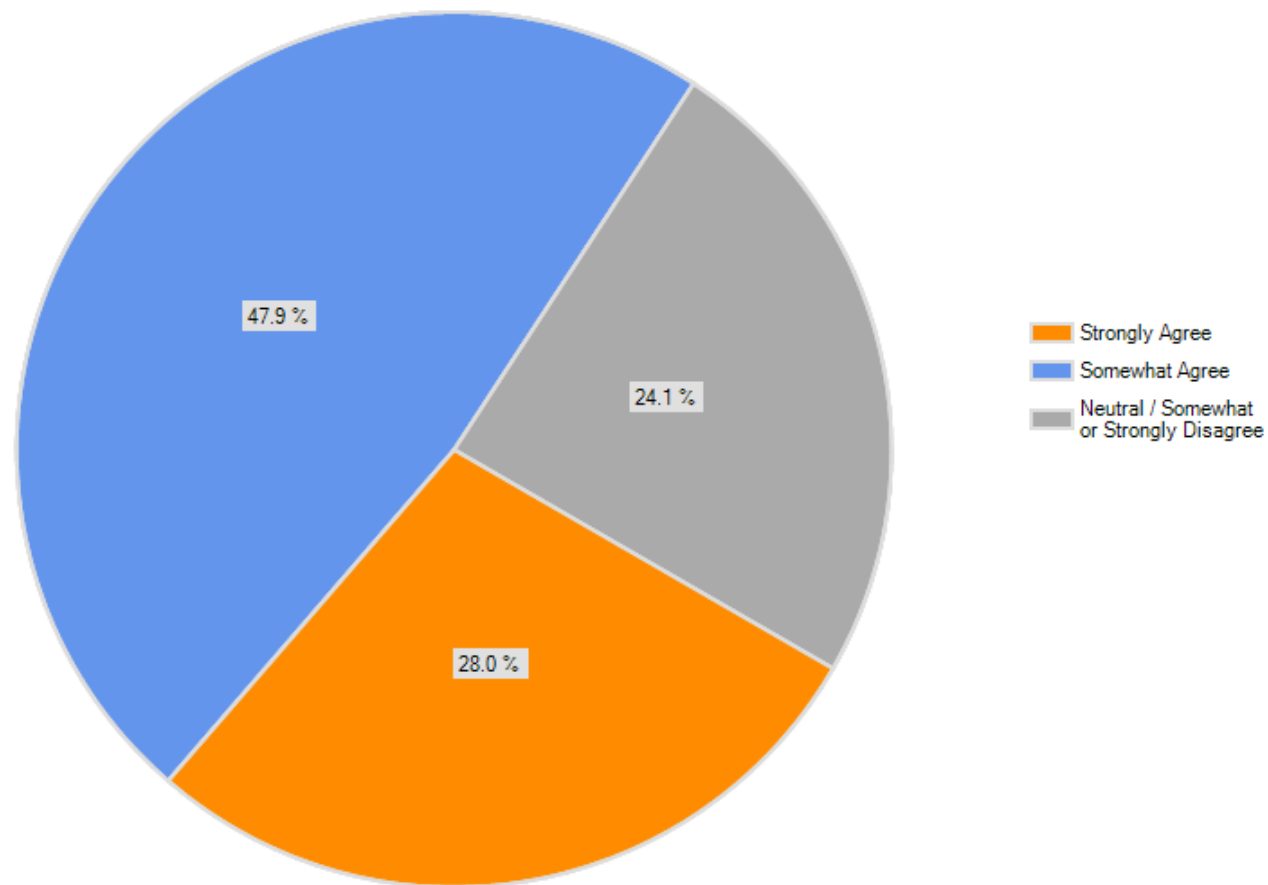


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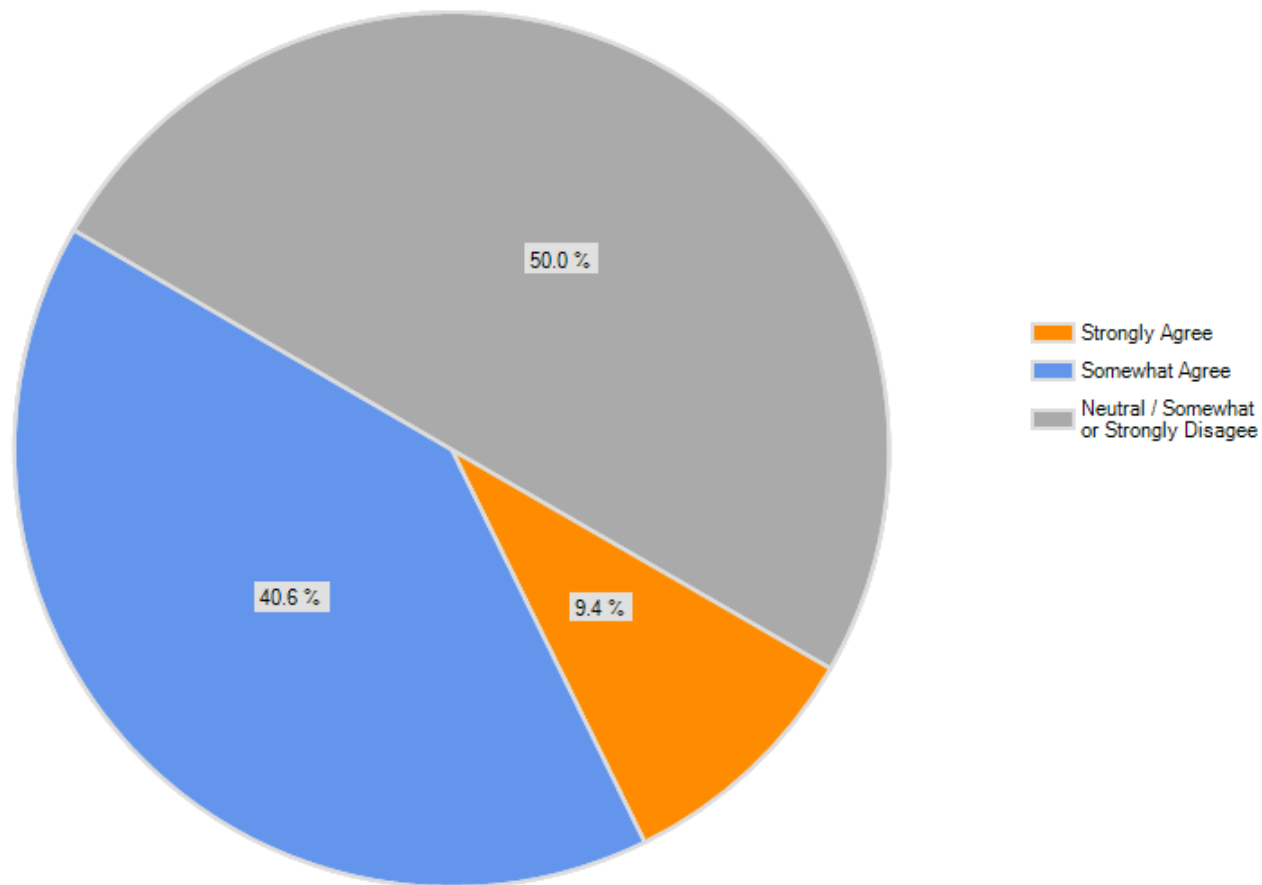
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Certifications Fail due to Misaligned Incentives

I believe that the certification bodies are marketing organizations that are primarily concerned about the advancement of their organization's brand and proliferation of their proprietary certifications:



Outside of the actual certification itself, I believe that the certification bodies provide additional services that enhance the careers of their members as information security professionals:





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Key #1: Constant Learning

I use the following information sources somewhat frequently:





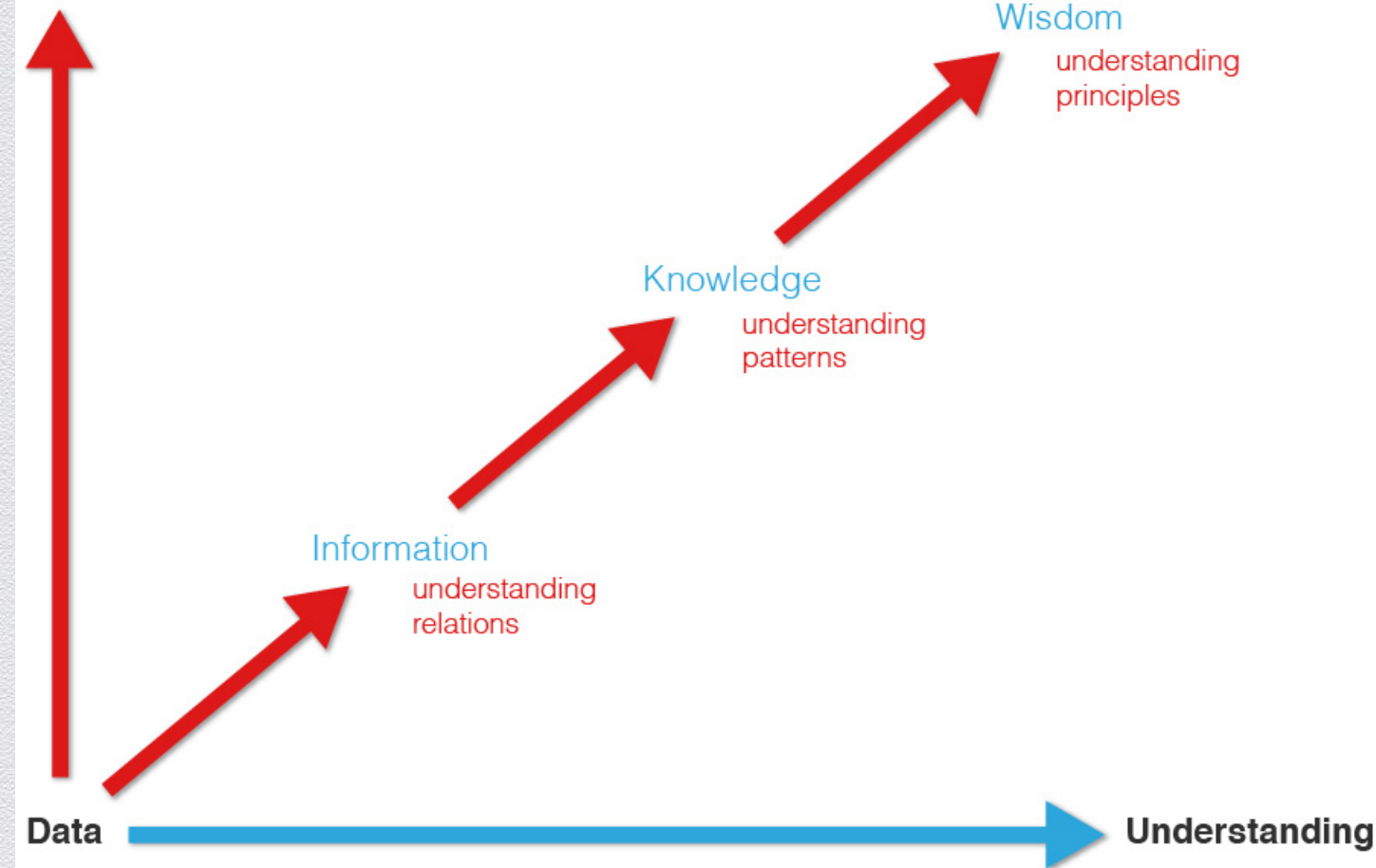
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Key #2: Skills, Not Credentials

Systems Thinking

Correctedness





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**Key #3:
Just-In-Time (JIT)
Education**



Hacker Academy



KHANACADEMY

udemy



treehouse™

coursera



STARTER SCHOOL

c<>de school
learn by doing

PentesterAcademy



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Constant Evolution

- ◆ Materials needs to evolve as our industry does
- ◆ Educators need to be rewriting courses on a monthly timeframe, not a yearly or every 3 year timeframe.
- ◆ This is especially required in security

Notifications

New Episode

Episode 72: Dynamic Tables, Progress Button Styles, Spinkit

The Treehouse Show



8 days ago

Announcement

Forum Video: Importing CSVs in Rails & Updating Select2 with AJAX

Every Thursday a Treehouse teacher will be posting a video response to an unanswered question in the forum. You'll learn how to use Rails to import CSVs into a database. Also how to use jQuery to update a Select2 select box when another Select2 select box is changed.



13 days ago

New Episode

Being Job Ready - with Rachel Parsons

Treehouse Friends



13 days ago

New Episode

Episode 71: Animated GIFs for Documentation, Chrome DevTools for Mobile, Grunt

The Treehouse Show



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Questions?

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