

# Fantastic Metrics

And Where to  
Find Them

Going from security awareness to **security readiness** starts with measurable behavior change. This means relying on some fantastic **metrics**, and knowing where to find them.

When you're tasked with building your company's security awareness program, it's easy to dive right into the training content, and use training completion as the measure of success. But this misses the business-critical step of asking those classic questions:

*What* are you trying to drive awareness around?

*How* will you know what to train and build campaigns on?

*Who* needs training the most?

*When* do we know we've met our goals?

How should your company answer the above? Well, it's different for every organization, but ultimately it comes down to being able to measure your employees' security behaviors.

## Basically, you need to start with metrics.

With a metrics-first approach, you can start with a baseline to benchmark current gaps in your security culture, and how, when or if those gaps close as your security awareness program goes on. And you'll have a much easier time communicating up to executives to show the value of your work. This is something I learned and implemented in my days working at Salesforce and that we now help companies address every day here at Elevate Security.

When you're able to show measurable impact to your employees' security behaviors, you'll be able to show that your program has matured beyond "security awareness" to what we call "security readiness." Security readiness means that your employees aren't a liability or a weak link. Instead, they're empowered with the training, rewards and reinforcement to be security superheroes, a front-line of defense against the 90% of incidents and losses that try to exploit human behaviors.

In this guide, we'll show you how to leverage metrics to build a successful security behavior change program, including:

- What metrics to use for goals to measure how and when your employees' security behavior improve
- The systems and software your company may use where you can source those metrics
- How to verify or test the data from those sources

## Typical goals of a security behavior change program

<b>Phishing:</b> Reducing the click-through rate Increase the reporting rate	
<b>Using Internet Safely:</b> Reduce the amount of unknown and malicious sites visited Reduce the number of dangerous downloads on the network	
<b>Handling Sensitive Information:</b> Reduce the amount of sensitive information given over the phone Reduce the amount of sensitive data stored outside of the network Reduce the number of sensitive documents not shredded Reduce data inappropriately stored (ie on local laptop) Reduce sensitive data sent over email	
<b>Password Hygiene:</b> Increase the number of people who use a password manager Reduce password reuse across sites	
<b>Social Media:</b> Reduce the amount of sensitive data posted on social media sites	

**Physical Risk:**

Reduce the number of unauthorized badgze surfing attempts

Increase in the number of clean desks

Increase in the number of people who lock their screens when stepping away



**Working Safely Outside the Office:**

Increase in the number of people connecting via VPN

Increase in the number of privacy screens used

Decrease in the number of insecure Wifi connections used

Reduce the number of public conversations



## Where to source and verify security behavior change metrics

	<b>What does this mean?</b>	<b>Technology Sources for Data</b>	<b>How to test/verify?</b>
<b>Using the Internet Safely</b>	Browsing to unknown/malicious sites, dangerous downloads, etc	<ul style="list-style-type: none"> <li>Proxies - Bluecoat, ZScaler, Websense</li> <li>Endpoint - SentinelOne, Carbon Black, Cylance, Symantec, Trend</li> </ul>	<ul style="list-style-type: none"> <li>These solutions, if they have an API and results are associated with a user and not a machine or IP will give very good insight into this behavior.</li> <li>Phishing of employees</li> </ul>
<b>Handling Sensitive Information</b>	Proper handling of sensitive data (storage/transit), social engineering	<ul style="list-style-type: none"> <li>Proxies - Bluecoat, ZScaler, Websense</li> <li>DLP - Vontu</li> </ul>	<ul style="list-style-type: none"> <li>These solutions, if they have an API and results are associated with a user and not a machine or IP will give very good insight into this behavior.</li> <li>Social Engineering could be done through custom-built tools like phishing/vishing simulations.</li> </ul>
<b>Password Hygiene</b>	Utilizing strong passwords on websites, password reuse	<ul style="list-style-type: none"> <li>Password Managers - LastPass, Keypass</li> <li>Custom Built Browser Plugin</li> </ul>	<ul style="list-style-type: none"> <li>Looking at exposed password sets and matching against employee names.</li> </ul>
<b>Using Social Media Safely</b>	Posting information on social media sites which puts the individual or company at risk	<ul style="list-style-type: none"> <li>Zerofox</li> </ul>	<ul style="list-style-type: none"> <li>Zerofox presented a tool they plan to open source on automating twitter phishing attacks. Could use this tool for testing click rate.</li> <li>Create a profile that friends employees and asks for data</li> </ul>
<b>Protecting Mobile Devices and Information</b>	Mobile device configuration and settings plus basic endpoint security	<ul style="list-style-type: none"> <li>Endpoint - Lookout, ESET, Trend, etc</li> <li>MDM Vendors - Airwatch, MobileIron, Good, etc</li> </ul>	<ul style="list-style-type: none"> <li>For endpoint malware solutions, if they have an API and results are associated with a user and not a machine or IP it will give very good insight into this behavior.</li> </ul>
<b>Protecting and Disposing of Data Securely</b>	For individuals who have legitimate access, how do they handle the data once they move it to other devices?	<ul style="list-style-type: none"> <li>Proxies - Bluecoat, ZScaler, Websense</li> <li>DLP - Vontu</li> </ul>	<ul style="list-style-type: none"> <li>Aggregate pentest findings for insecure data storage</li> </ul>
<b>Protecting Against Physical Risk</b>	Badge Surfing, not locking machines, clean desk		<ul style="list-style-type: none"> <li>Manual assessments of unlocked machines, badge surfing, and clean desk policy</li> <li>Video reviews of a set of doors at the same time each week for a period of time.</li> <li>Surveys</li> </ul>
<b>Working Safely Outside the Office</b>	WiFi, physical security, connecting via VPN, public area conversations	<p>These only detect bad outcomes, not bad behavior.</p> <ul style="list-style-type: none"> <li>Proxies - Bluecoat, ZScaler, Websense</li> <li>Endpoint - SentinelOne, Carbon Black, Cylance, Symantec, Trend</li> </ul>	<ul style="list-style-type: none"> <li>Survey</li> </ul>



## TAKE THE NEXT STEP TOWARDS SECURITY READINESS

Get a demo of the Elevate Platform, which empowers your team to visualize and analyze your company's security posture by capturing all your security behavior metrics in one place.

*Email [hello@elevatesecurity.com](mailto:hello@elevatesecurity.com) to get started*

## About Masha Sedova



Masha Sedova is an industry-recognized people-security expert, speaker and trainer focused on engaging people to be key elements of secure organizations. She is the co-founder of Elevate Security, an innovative new approach to security awareness. Before Elevate, Masha was a security executive at Salesforce where she built and led the security engagement team focused on improving the security mindset of employees, partners, and customers. In addition, Masha is a member of the Board of Directors for the National Cyber Security Alliance and a regular presenter at conferences such as Blackhat, RSA, ISSA, Enigma, and SANS.

## About Elevate Security

Elevate Security is the first fully integrated Security Behavior Platform. Elevate enables CISOs and security awareness practitioners to transform employees into security superheroes as a first line of defense against the 93% of security incidents that target human error. Customers across industries, from Autodesk to Clover, have seen employee detection and reporting of attacks improve by 5x or more. With offices in Berkeley, CA, and Montreal, Elevate is backed by Defy Partners, Costanoa Ventures, and is currently hiring. To learn more, please visit [elevatesecurity.com](https://elevatesecurity.com).



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