

RSA® Conference 2015

San Francisco | April 20-24 | Moscone Center

SESSION ID: HT-T10

Hacktivism: It's Not Just for the Lulz Anymore

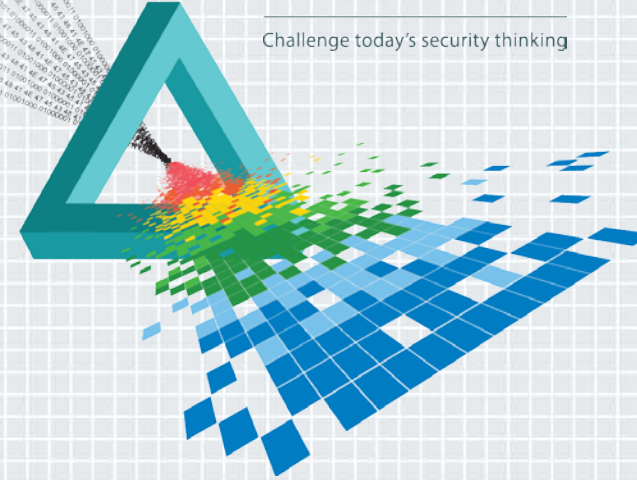
Joe Gallop

Strategic Lead, Hacktivism Threat Intelligence, iSIGHT Partners

 **iSIGHTPARTNERS**

CHANGE

Challenge today's security thinking

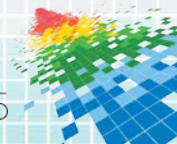




“One cannot legitimately hope to improve a nation's free access to information by working to disable its data networks.”

- cDc, CCC, 2600, Phrack

July 1, 1999



Anonymous is Dead

Nothing New Under the Sun



We - the undersigned - strongly oppose any attempt to use the power of hacking to threaten or destroy the information infrastructure of a country, for any reason. This has nothing to do with hacktivism or hacker ethics and is nothing a hacker could be proud of.

What happens when someone in another country decides that the United States needs to be punished for its human rights record? This is one door that will be very hard to close if we allow it to be opened.

Governments worldwide are seeking to establish cyberspace as a new battleground for their artificial conflicts. If hackers solicit recognition as paramilitary factions then hacking in general will be seen as an act of war.

Strategic combat planning in the United States and among other nations has reached the point where real-world cases are needed to justify assigned budgets. The LoU is providing this real-world case now.

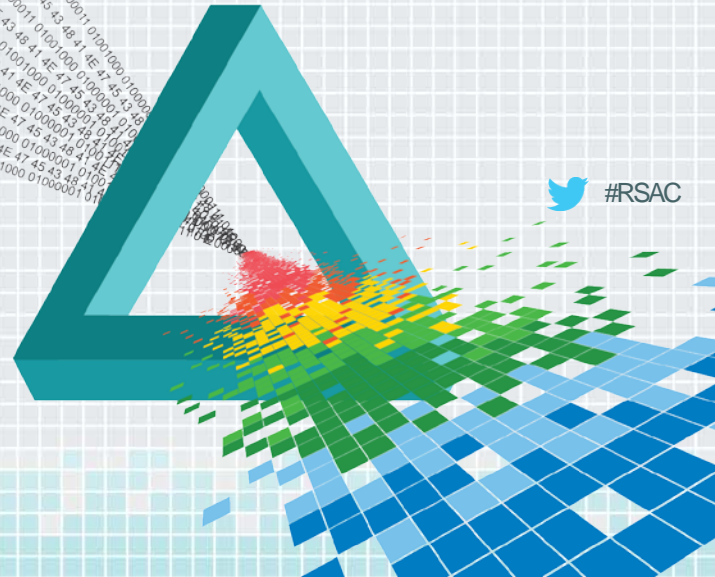
How Can They Not?



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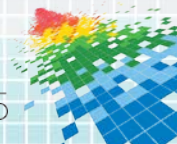
Plausible Deniability



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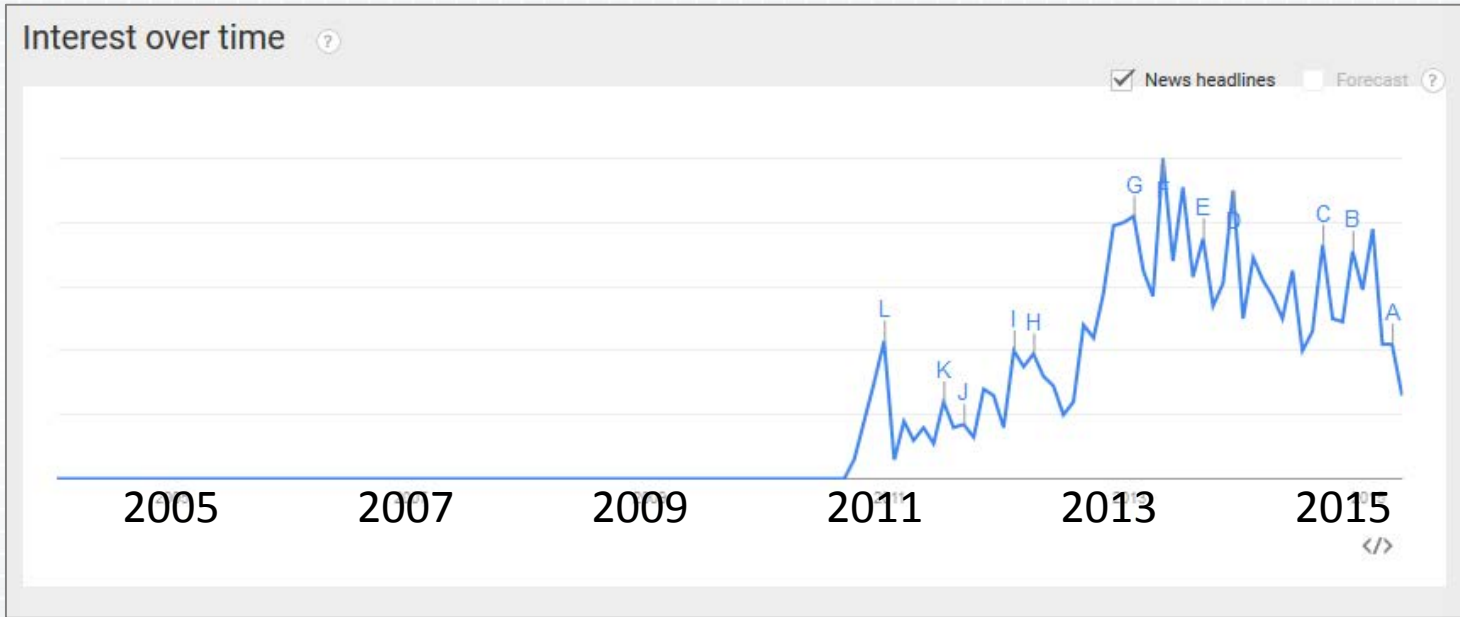
What is Hacktivism?

“Using technology to improve human rights across electronic media.”

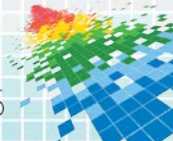


Anonymous Made Hacktivism What It Is

“Hacktivist”

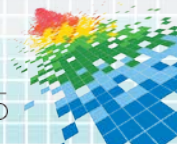


Google Trends



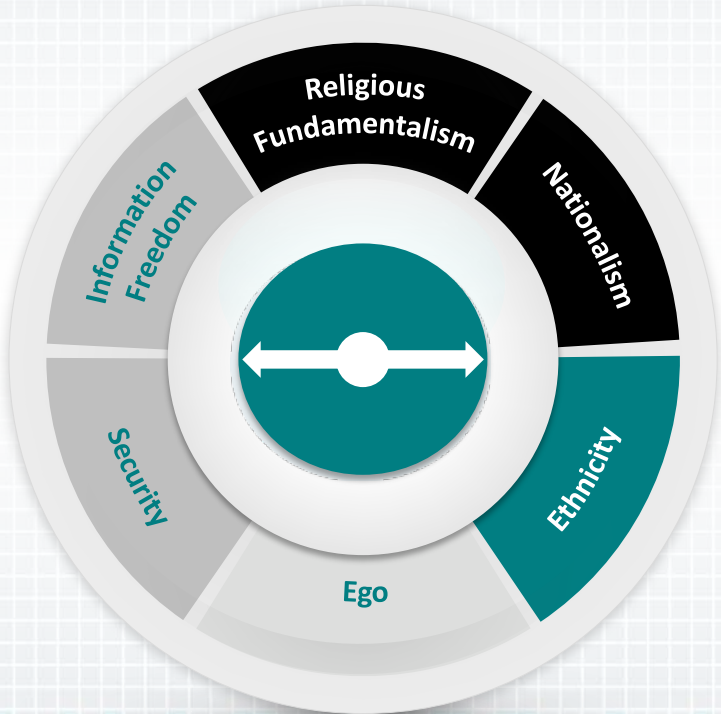
Web Definitions

- ◆ Hactivism is the act of breaking into a computer system or disrupting services for a politically or socially motivated purpose.
- ◆ Hacking as an intimidation tactic, or “hactivism,” is an emerging threat to the online world, involving the use of embarrassment to coerce action.
- ◆ The cornerstone of hactivism is the recruitment of common people through social media to engage in participatory action to produce a loud noise.



Defining Hacktivism

MOTIVATIONS



OBJECTIVES



Actions



Opinion



Justice

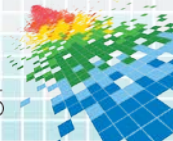
UNIQUE FACTORS



Publicity

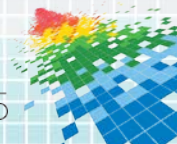


Disruption



Hacktivism:

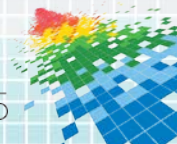
Cyber threat activity that is motivated by ideology or rationale, with the objective of either enacting justice or of directly altering the actions or opinions of an audience.



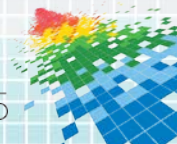
Grassroots vs. State-sponsored



“We believe that the LoU should carefully investigate the idea of declaring "war" against China and Iraq. Was it planted with them by someone with different interests in mind other than advancing human rights considerations?”



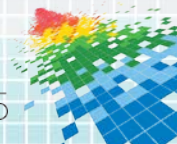
Who Made Hacktivism Fakeable?



State-Sponsored Hacktivism



- ◆ Institutional use of Cyber Espionage methodology is assumed.
- ◆ State linked hacktivist groups are growing in number and impact.

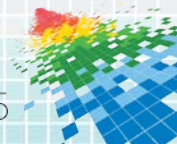


Media Misinformation

- ◆ 24-hour news cycle turns out large numbers of speculative reports.



- ◆ Hacktivists seek out this type of coverage, and make unsubstantiated claims in attempts to publicize their cause or their build their ego.



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Impact and Effectiveness



Perception is Reality

Inauthentic Attacks

Attacks are unsuccessful
or do not occur.

Hacktivists claim,
media promulgates.

Public perception
is public reality.



Damage by Association

Association may be real,
fake, or insignificant.

Propaganda implies or
claims association.

Public perception
is public reality.



Mountains and Molehills

BRAND DAMAGE

CONFIDENCE LOSS

- Service failure
- User account comp.

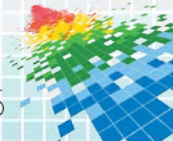
COMP. ADVANTAGE LOSS

- Industry-critical failure
- Harassment

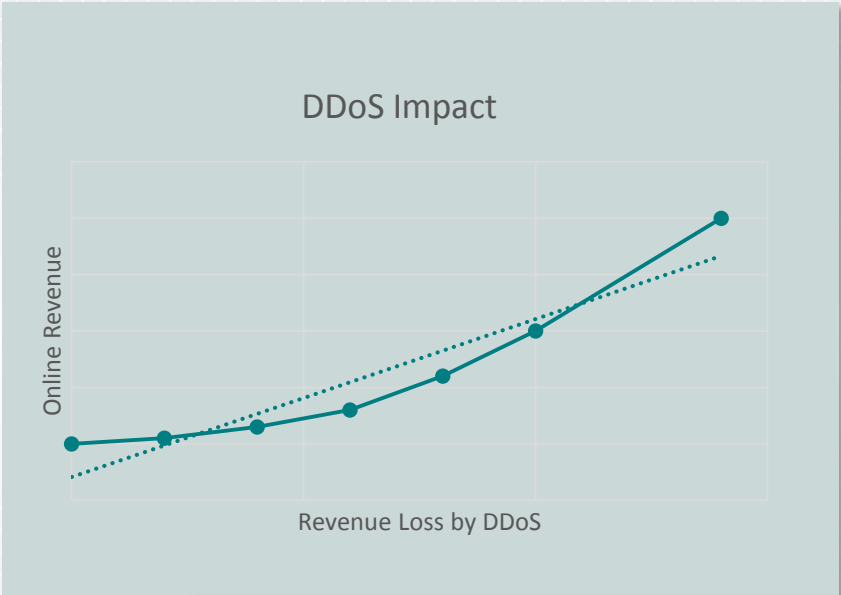
TRUST LOSS

- Reg/Legal Impact
- Social propaganda

Hactivism



Online Revenue

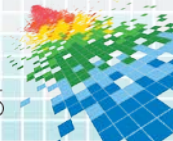


What is the cost of a DDoS attack?

Operation Ababil

We shall attack for 8 hours daily, starting at 2:30 PM GMT, every day.
Tuesday 9/25/2012 : attack to Wells Fargo site, www.wellsfargo.com
Wednesday 9/26/2012 : attack to U.S. Bank site, www.usbank.com
Thursday 9/27/2012 : attack to PNC site, www.pnc.com
Weekends: planning for the next week' attacks
Mot. Inz ad-Din al-Qasbi Cyber Fighters

\$40,000 - \$400,000/hr



Production

Aramco Says Cyberattack Was Aimed at Production

By REUTERS DEC. 9, 2012

“The main target in this attack was to stop the flow of oil and gas to local and international markets.”

We, behalf of an anti-oppression hacker group that have been fed up of crimes and atrocities taking place in various countries around the world, especially in the neighboring countries such as Syria, Bahrain, Yemen, Lebanon, Egypt and ... , and also of dual approach of the world community to these nations, want to hit the main supporters of these disasters by this action.

One of the main supporters of this disasters is Al-Saud corrupt regime that sponsors such oppressive measures by using Muslims oil resources. Al-Saud is a partner in committing these crimes. It's hands are infected with the blood of innocent children and people.

In the first step, an action was performed against Aramco company, as the largest financial source for Al-Saud regime. In this step, we penetrated a system of Aramco company by using the hacked systems in several countries and then sended a malicious virus to destroy thirty thousand computers networked in this company. The destruction operations began on Wednesday, Aug 15, 2012 at 11:08 AM (Local time in Saudi Arabia) and will be completed within a few hours.

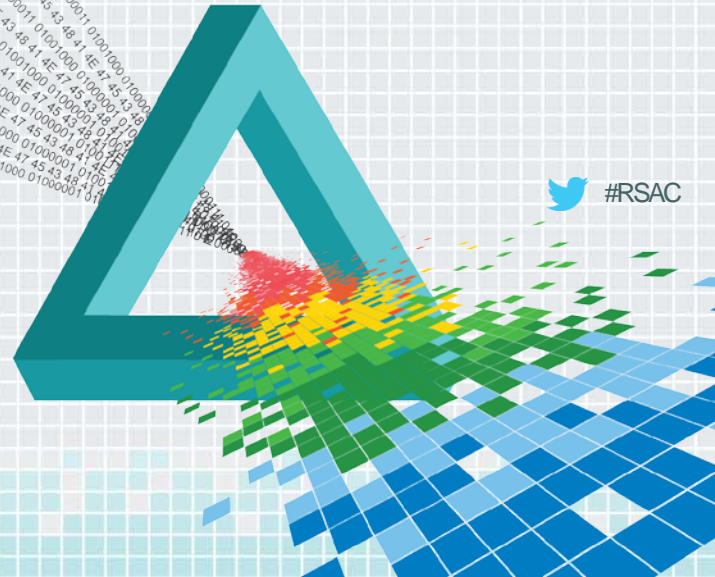
This is a warning to the tyrants of this country and other countries that support such criminal disasters with injustice and oppression. We invite all anti-tyranny hacker groups all over the world to join this movement. We want them to support this movement by designing and performing such operations, if they are against tyranny and oppression.

Cutting Sword of Justice

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Efficiency



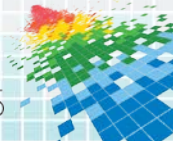
Lack of Recourse

Small or rogue nations:

- Faced with debilitating sanctions.
- There is no opportunity cost.
- There is no alternative for retaliation.

OPERATION
ABABIL

BB&T
PNC
Bank of America
WELLS FARGO
REGIONS
BMO Harris Bank
citibank



Simple Cost of Alternatives

Diplomatic:

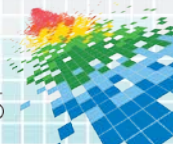


\$200,000/hr

Kinetic:



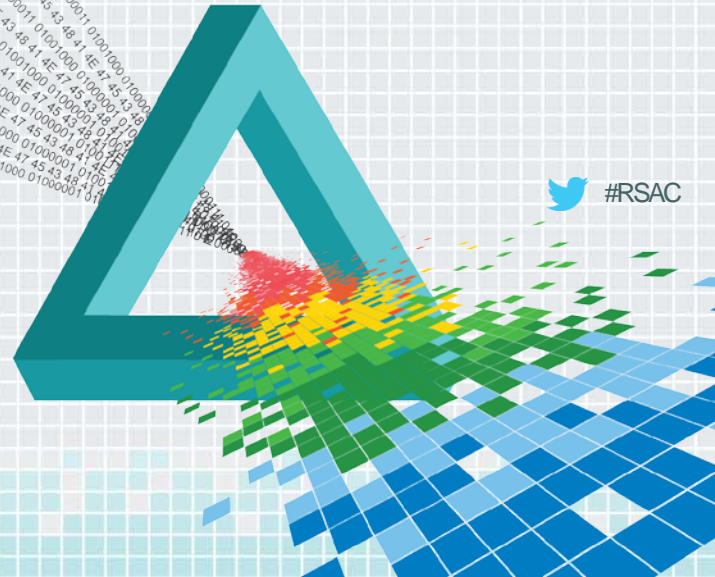
\$1 million



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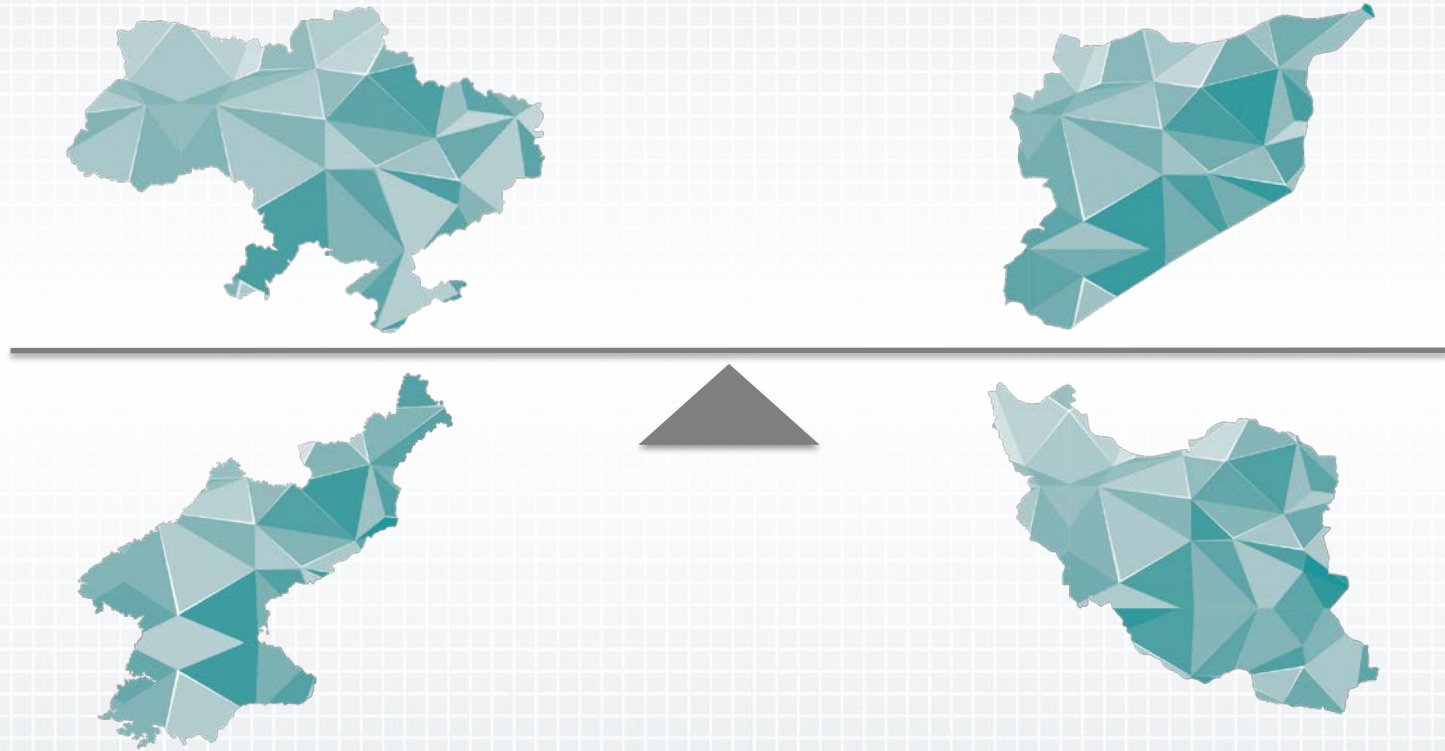
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Triggers and Tipping Points



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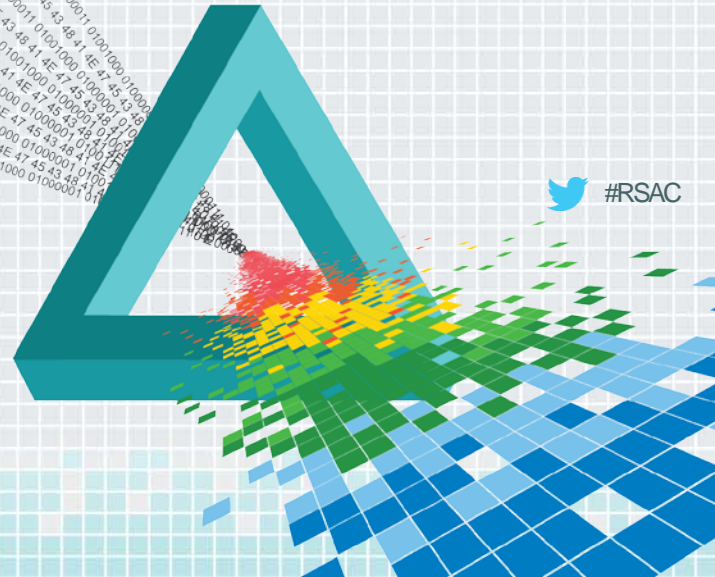
What is the tipping point?



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Should We Treat Them Separately?

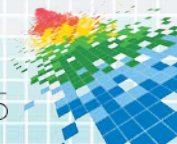


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Attribution

- ◆ Levels of attribution:
 - ◆ Specific technical identifiers – allows blocking from identical source
 - ◆ General category of actors – allows you to understand likely targets and objectives, direct public relations, policy
 - ◆ Team or actor persona – allows detection of other methods in use by actor
 - ◆ True name attribution – allows direct law enforcement engagement

As a security professional or intelligence analyst, attribution to a category of individuals is critical for affecting business.



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What Else Will Change?



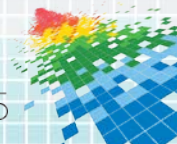
Attacks From all Corners

What is the tipping point for terrorists?

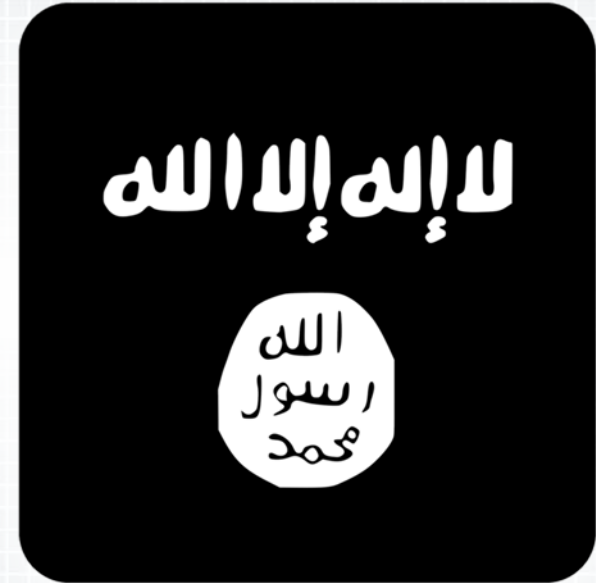
- ◆ Capability
- ◆ Motivation

What is the tipping point commercial institutions?

- ◆ Creativity
- ◆ Low risk/fear of reprisal



The Ubiquitous Mask



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Application



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CTI to Mitigation Strategy

Objective

Damage Mitigation
Strategy for Hactivist Threats

Supported by
Intelligence
Questions

Group/Actor
Capabilities

Targeted
Systems

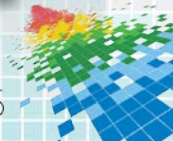
Profile-Raising
Issues

Profile-Raising
Threat Details



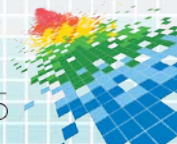
Foundation

Core Collection & Analysis Capabilities



Apply

- ◆ If you are in the news media sector, be skeptical.
- ◆ Do not simply react to public hacktivist pronouncements. Be informed as to the true capabilities of the different groups that are likely to impact your organization.
- ◆ Understand “trigger actions” for your organization. Educate business executives to be aware of possible triggering risks and establish a communications process that facilitates risk discussions (integrate IT security and public relations).
- ◆ Understand business risks and mitigation strategies for extended outages of critical systems. There is a difference between systems being degraded and being destroyed.





“Strategic combat planning in the United States and among other nations has reached the point where real-world cases are needed to justify assigned budgets.”

