

How to Build a Cyber Intelligence Capability

Stewart Kenton Bertram

Cyber Recon Manager: Verisign / iDefense

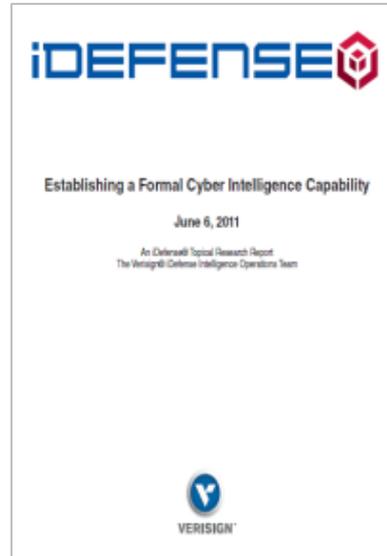


Session ID: STAR-308

Session Classification: Intermediate

RSACONFERENCE
EUROPE 2012

Content taken from iDefense White Paper



"Establishing a Formal Intelligence Program"

Stewart Kenton Bertram June 2011



Talk Contents

- Objective
 - Share some thoughts on what a good model for a cyber intelligence team should look like in the private sector
 - Lessons learnt over the past years



Talk Contents

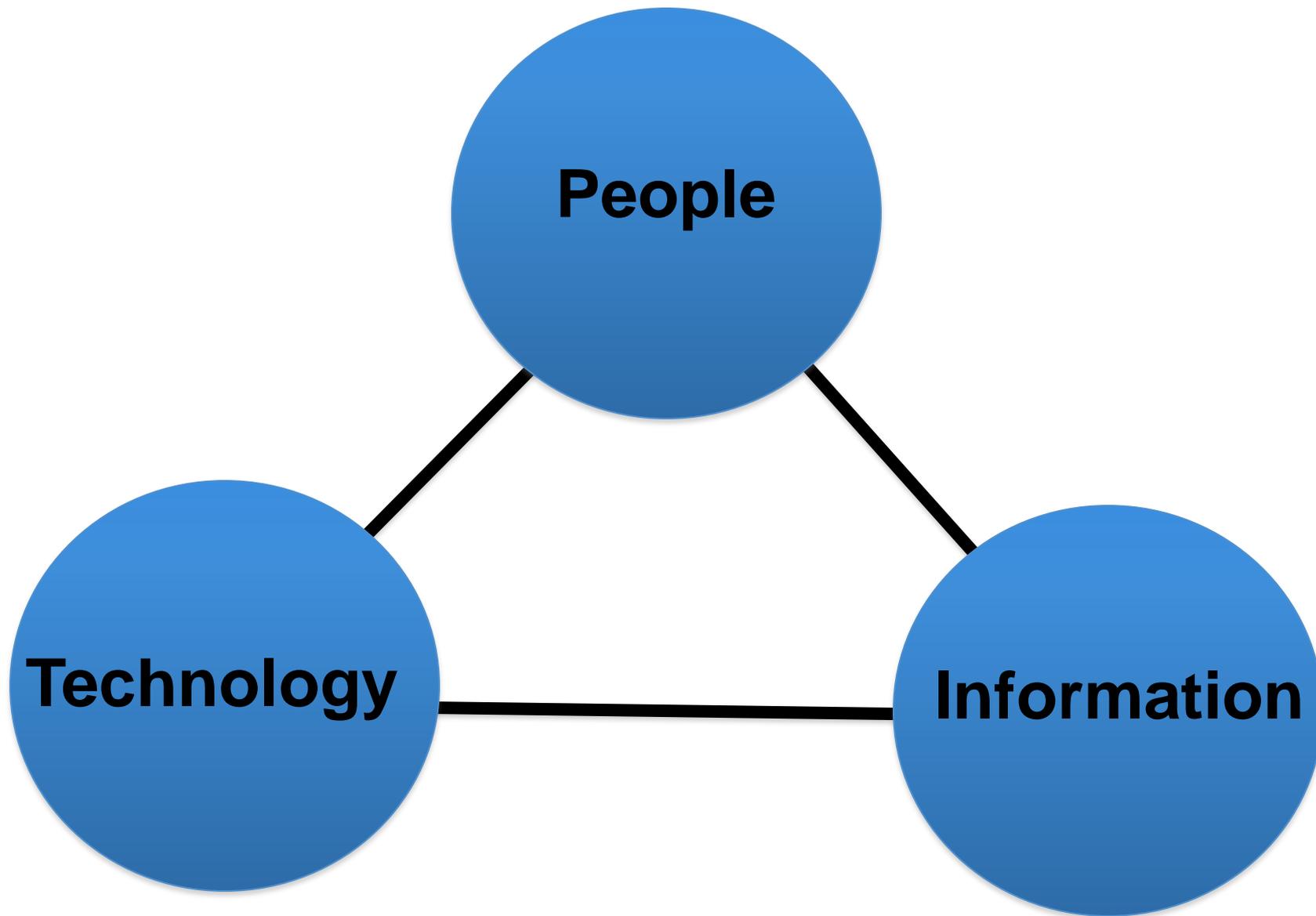
- Objective
 - Share some thoughts on what a good model for a cyber intelligence team should look like in the private sector
 - Lessons learnt over the past years
- Contents
 1. The socio-technical approach to intelligence team design
 2. The growth of the influence of the intelligence team within the wider business context
 3. Some points to consider – legal and reporting points

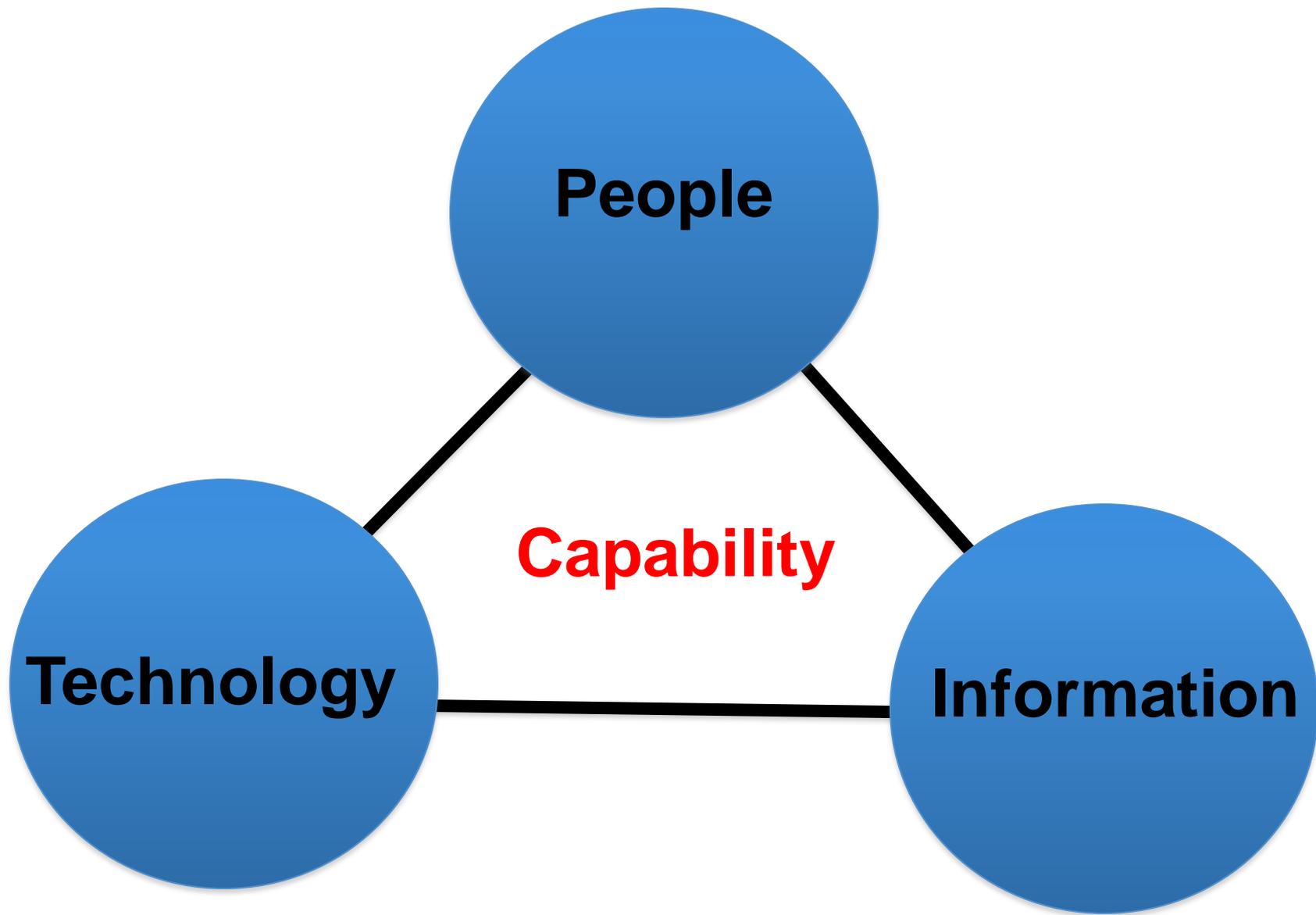


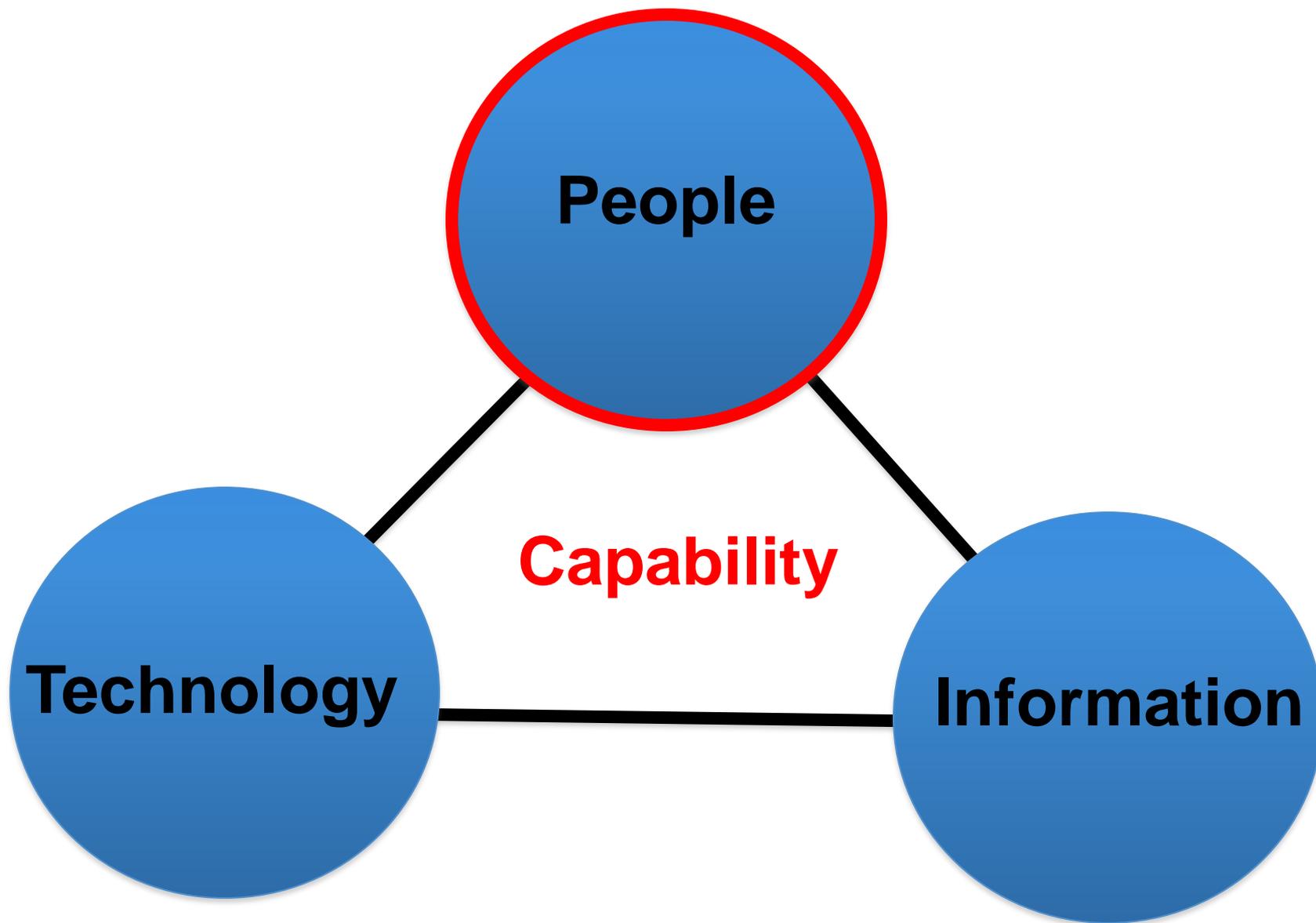
What is a Socio-technical system?

- *“an approach to complex organizational work design that recognizes the interaction between people, information and technology in workplaces”*









- *“Who should staff this theoretical team them?”*



RSA[®] CONFERENCE 2012

FEBRUARY 27-MARCH 2 | MOSCONE CENTER | SAN FRANCISCO

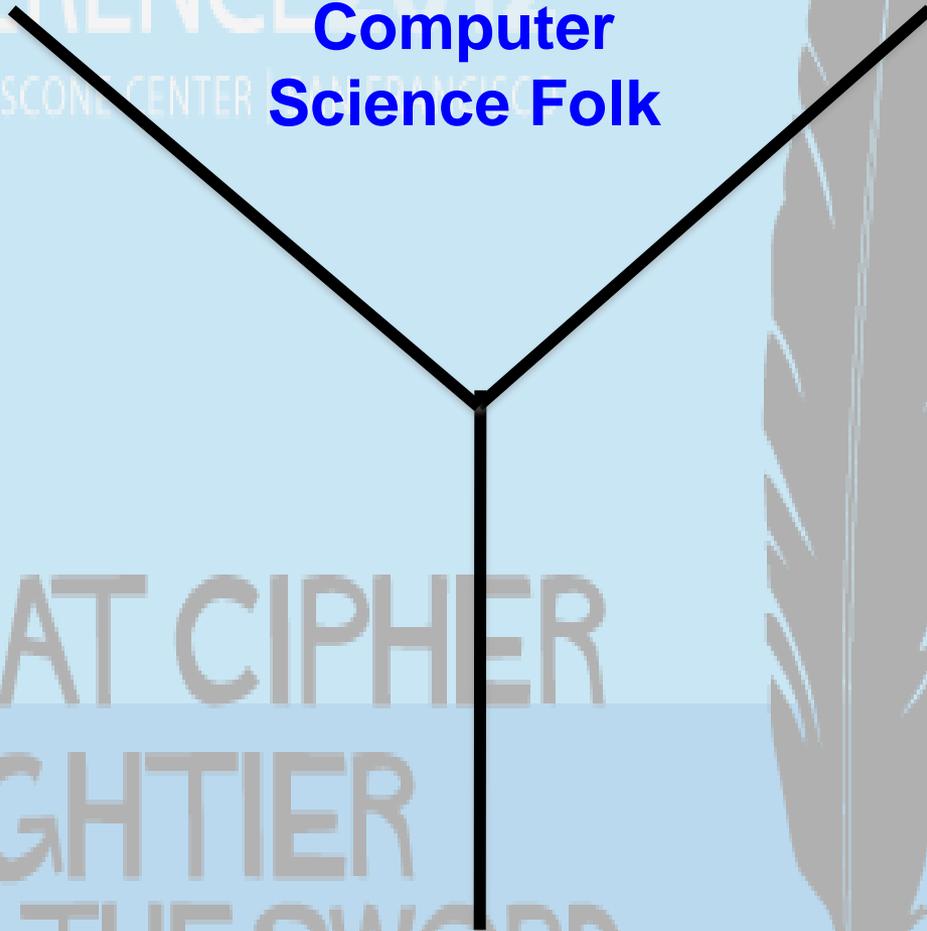
THE GREAT CIPHER
MIGHTIER
THAN THE SWORD



RSA CONFERENCE 2012

FEBRUARY 27-MARCH 2 | MOSCON CENTER | SAN FRANCISCO

**Computer
Science Folk**



THE GREAT CIPHER
MIGHTIER
THAN THE SWORD



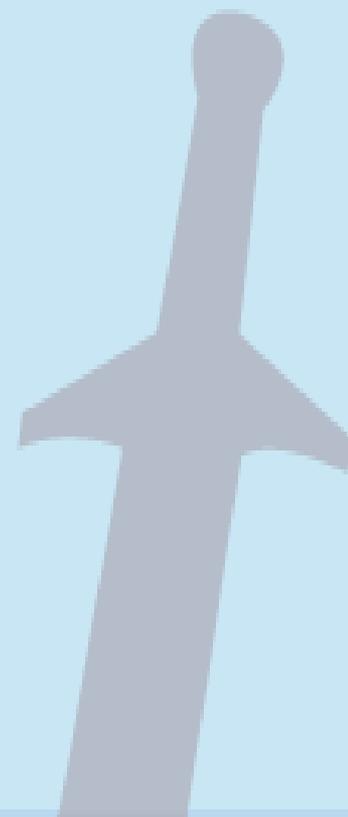
RSA CONFERENCE 2012

FEBRUARY 27-MARCH 2 | MOSCON CENTER | SAN FRANCISCO

**Computer
Science Folk**

**Former
Military**

THE GREAT CIPHER
MIGHTIER
THAN THE SWORD



RSA CONFERENCE 2012

FEBRUARY 27-MARCH 2 | MOSCON CENTER | SAN FRANCISCO

**Computer
Science Folk**

**Social
Science**

**Former
Military**

THE GREAT CIPHER
MIGHTIER
THAN THE SWORD



RSA CONFERENCE 2012

FEBRUARY 27-MARCH 2 | MOSCON CENTER | SAN FRANCISCO

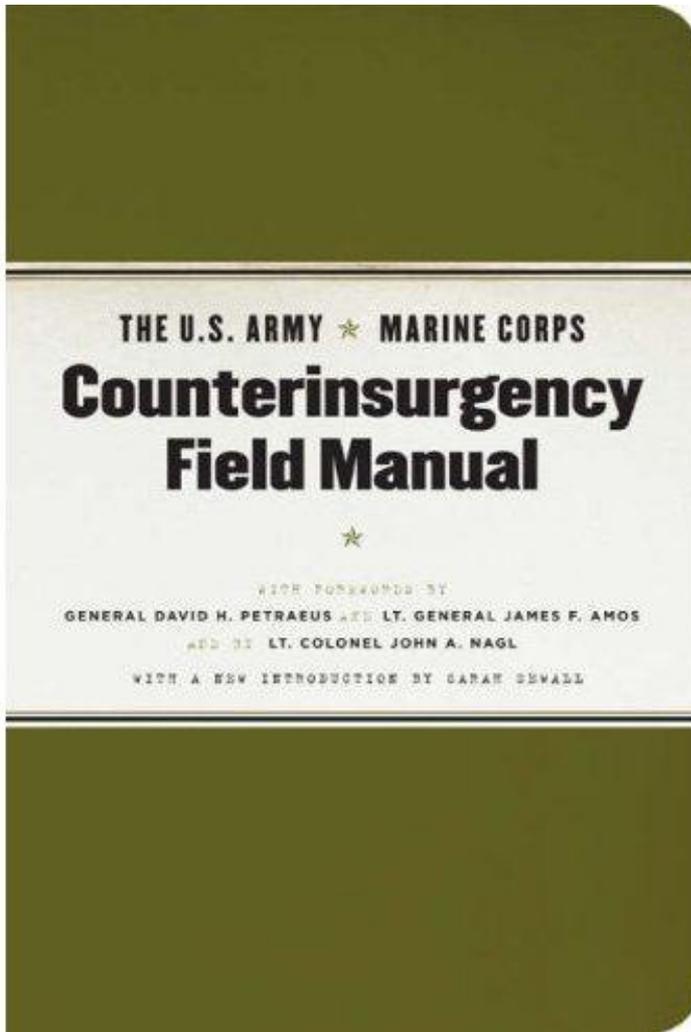
**Computer
Science Folk**

**Social
Science**

**Former
Military**

THE GREAT CIPHER
MIGHTIER
THAN THE SWORD





Counter Insurgency (COIN)

- Battle for hearts and minds
- Human Terrain Analysis





[Why We Protest Scientology](#)

[Our Goals](#)

What's New?

Home Forums

Initiatives

- 
Anonymous vs Scientology
 Discussions: 33,383 Messages: 992,508 Sub-Forums: 63
 Latest: WSB-TV: State investigates... JohnnyRUClear, 47 minutes ago
- 
Freedom of Information
 Discussions: 2,082 Messages: 48,675 Sub-Forums: 18
 Latest: Barrett Brown: Threats To FBI... Anonymous, 15 minutes ago
- 
Iran
 Discussions: 8,221 Messages: 45,785 Sub-Forums: 18
 Latest: Killing of captured Iranians... Anonymous, Today at 1:15 AM
- 
Occupy Wall Street
 Discussions: 169 Messages: 10,056 Sub-Forums: 3
 Latest: One way to piss the bank off Anonymous, Yesterday at 10:46 PM

Events

- 
Planning
 Discussions: 718 Messages: 8,651
 Latest: [Oct 13, 2012] Chicago... Joe's Body Thetans, Yesterday at 11:21 PM
- 
Follow Up
 Discussions: 155 Messages: 4,020
 Latest: Sept. 29th Düsseldorf... MOOG, Friday at 12:47 PM

Cross Initiative Resources

- 
Production Studio
 Discussions: 163 Messages: 3,631
 Latest: Wikileaks Partnership to End... AgentsOfTheFree, Friday at 11:11 PM
- 
How To
 Latest: Internet Explorer 9 fucking...

Sign Up Now!

Donate

\$160.00 Raised so far \$500.00 Monthly goal
 32%
[Donate](#)

Top Donations

-  Guest \$200.00
-  Anonymous \$100.00
-  anonymouschanology \$100.00

Staff Online Now



Members Online Now

	Title	Start Date	Replies	Views	Last Message ↓
	[Oct 13, 2012] Chicago Scientology protest for October (Chicago, USA) Strong Strength, Sep 5, 2012		Replies: 31 Views: 628		Joe's Body Thetans Yesterday at 11:21 PM
	[Nov 5, 2012] @OpVendetta2012 - 5th of November - London (Trafalgar square) dcht-ID, Jul 22, 2012		Replies: 35 Views: 1,345		Joe's Body Thetans Yesterday at 6:58 AM
	[Oct 26, 2012] Enemies of the State: Solidarity for Bradley Manning, Julian... (New York, NY) anonymous2601, Friday at 4:01 PM		Replies: 3 Views: 95		anonymous612 Friday at 9:25 PM
	[Oct 11, 2012] LONG CAT IS LONG (Groningen, Groningen) KittyKatSpanker, Sep 12, 2012		Replies: 14 Views: 628		Anonymous Friday at 9:13 AM
	[Oct 20, 2012] Europaweiter Protesttag gegen INDECT Berlin (Berlin) Stiffmaster, Sep 13, 2012		Replies: 3 Views: 276		14198764829477292 Friday at 6:48 AM
	[Nov 5, 2012] PROTEST FOR PEOPLE FROM SOUTH AUSTRALIA (SA) Tyain, Tuesday at 7:33 AM		Replies: 9 Views: 165		Anonymous Thursday at 3:37 AM
	[Nov 1, 2012] OPERATION: BE EPIC (UNITED STATES) WEXAREXANONYMOUS, Sep 17, 2012		Replies: 7 Views: 823		Anonymous Wednesday at 2:01 AM
	[Oct 20, 2012] Spontaneous Congregation of Disgruntled Laborers (New York NY) conatus, Sep 28, 2012		Replies: 3 Views: 149		another123 Sep 29, 2012
	[Oct 6, 2012] Anonymous vs Scientology Rally (Dublin, Ireland) Nataku, Sep 26, 2012		Replies: 0 Views: 300		Nataku Sep 26, 2012
	[Sep 22, 2012] Scientology Festival of FLUNK (San Fagcisco, CA) skeptical2girl, Sep 10, 2012		Replies: 5 Views: 199		Anonymous Sep 19, 2012
	[Sep 22, 2012] Anonymous vs Scientology Rally (Dublin, Ireland) Nataku, Sep 9, 2012		Replies: 2 Views: 256		Anonymous Sep 17, 2012
	[Sep 12, 2012] Vow of Silence (All Public Locations.) liveANONYMOUS, Sep 12, 2012		Replies: 2 Views: 112		liveANONYMOUS Sep 12, 2012



Anonymous
Member

It took 42 Minutes for your latest crap to be domed. Wonder how long this thread will take?

Betting windows are open!

Anonymous, Sep 26, 2012

#3 Reply



Mutante
Member

People are people? What about clones?

Mutante, Sep 26, 2012

#4 Reply

👍 Like x 1 List



Anonymous
Member

Bud said: †

Speaking for oneself is hard these days.

It's much easier to get one's thought through some demotivator that seems to be appropriate. at this time.

OFF is the general direction in which I'd like you to fuck, Scientologist.

How's that for a non-demotivational demotivational?

Fucknut.

Anonymous, Sep 26, 2012

#5 Reply



Anonymous
Member

Y'all niggaz postin' in a TROLL thread

LOL

Anonymous, Sep 26, 2012

#6 Reply



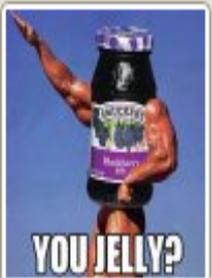
Anonymous said: †

Y'all niggaz postin' in a ~~TROLL~~ future Dome thread

LOL

OpInfoStorm: Help us translate Anon and WWP flyers into Spanish!

Discussion in 'Production Studio' started by LastOneStanding, Aug 30, 2011.



Most of the graphic content related to Anonymous is written in English. It's time to join forces and help make the Spanish forum as formidable as the English one. Lets put our designs in this thread, do some critical work to improve them and build a collection of graphic materials of high quality advertising, as only Anonymous can do it!

IF you need help with translations feel free to PM me or silly433.

We appreciate your halp

LastOneStanding, Aug 30, 2011

#1 Reply

Anonymou Synapse and Nishimori like this.

LastOneStanding
Member

OpInfoStorm: Help us translate Anon and WWP flyers into Spanish!

Discussion in 'Production Studio' started by LastOneStanding, Aug 30, 2011.



LastOneStanding
Member

Most of the graphic content related to Anonymous is written in English. It's time to join forces and help make the Spanish forum as formidable as the English one. Lets put our designs in this thread, do some critical work to improve them and build a collection of graphic materials of high quality advertising, as only Anonymous can do it!

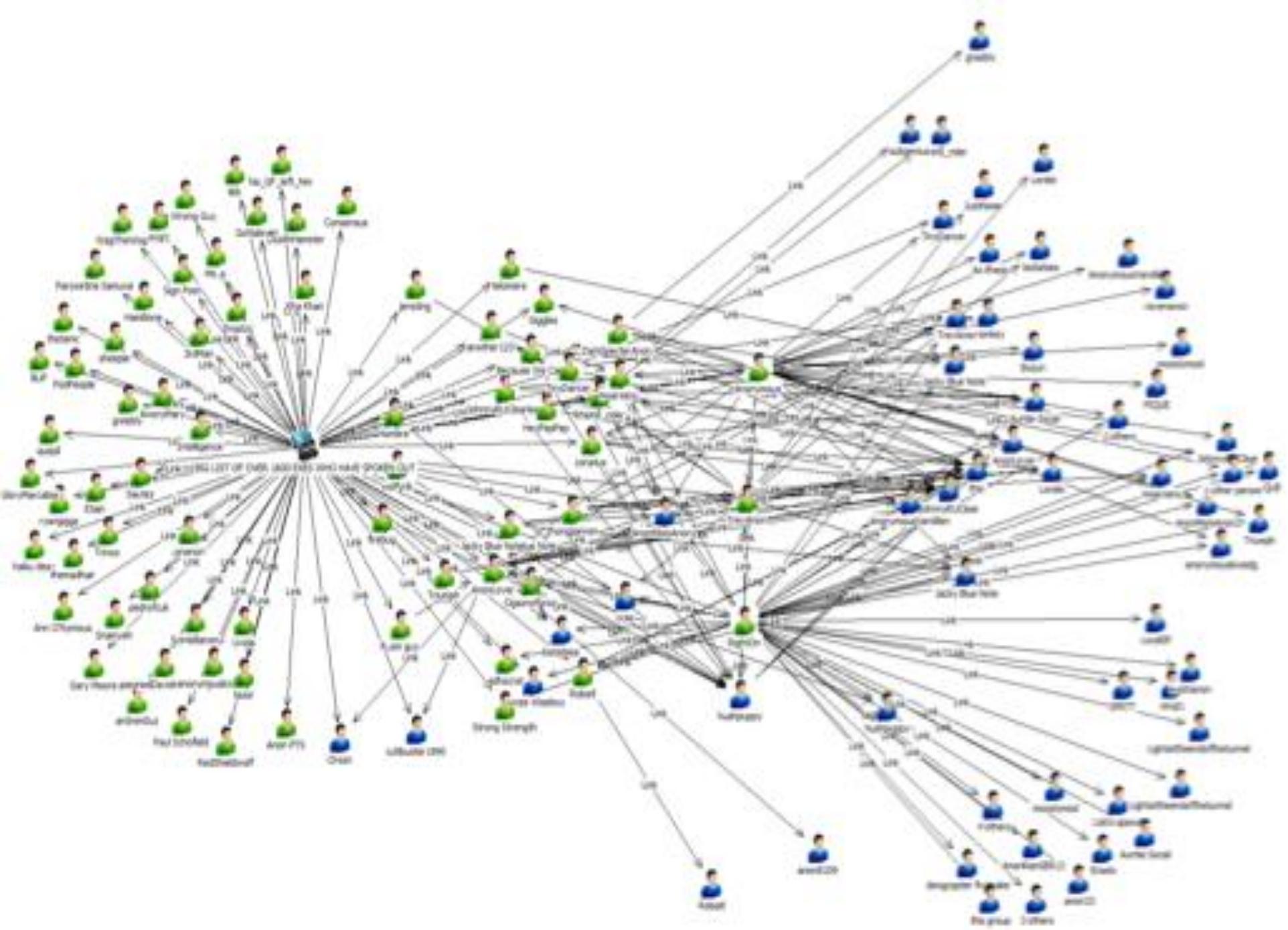
IF you need help with translations feel free to PM me or silly433.

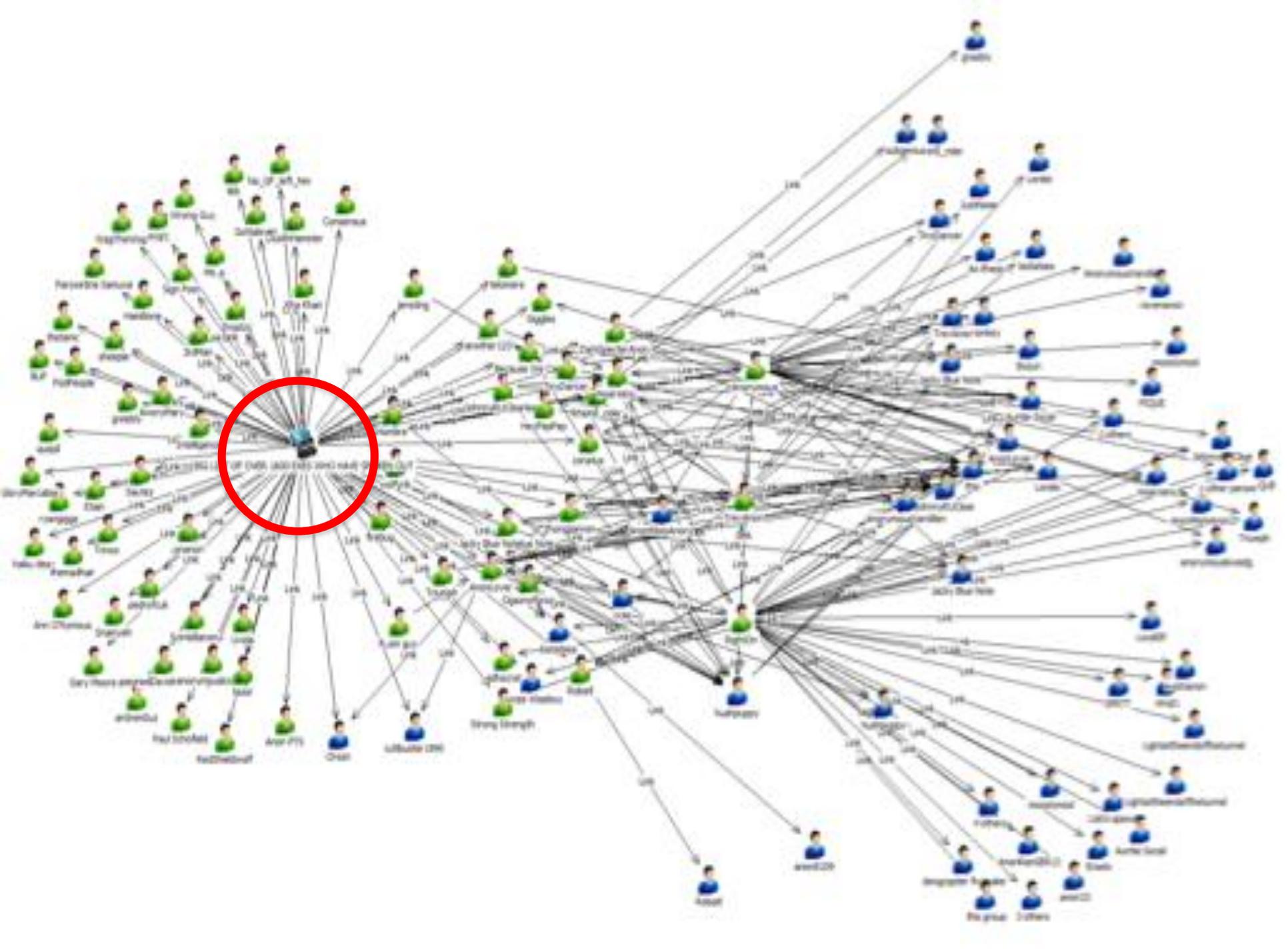
We appreciate your halp

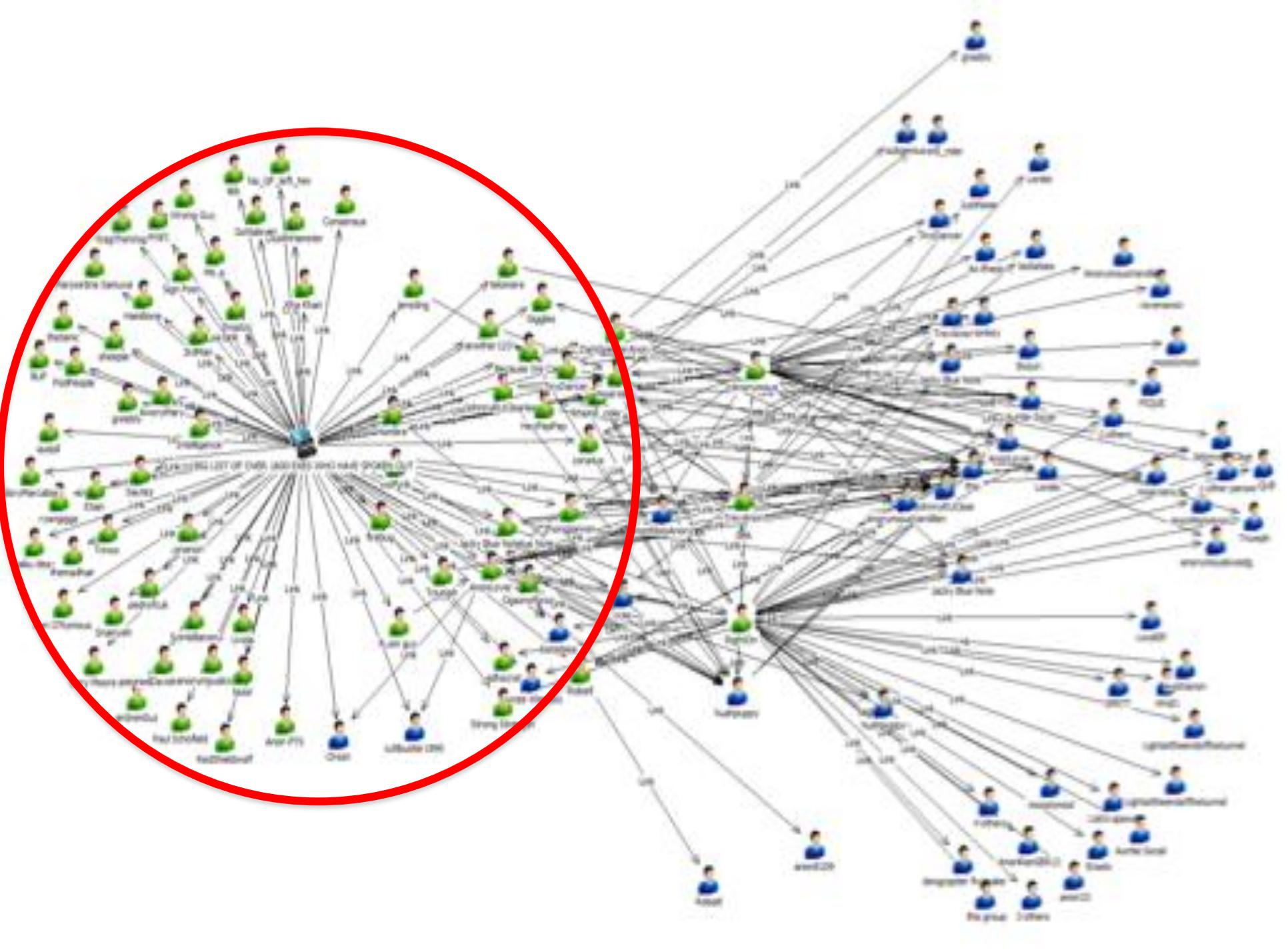
LastOneStanding, Aug 30, 2011

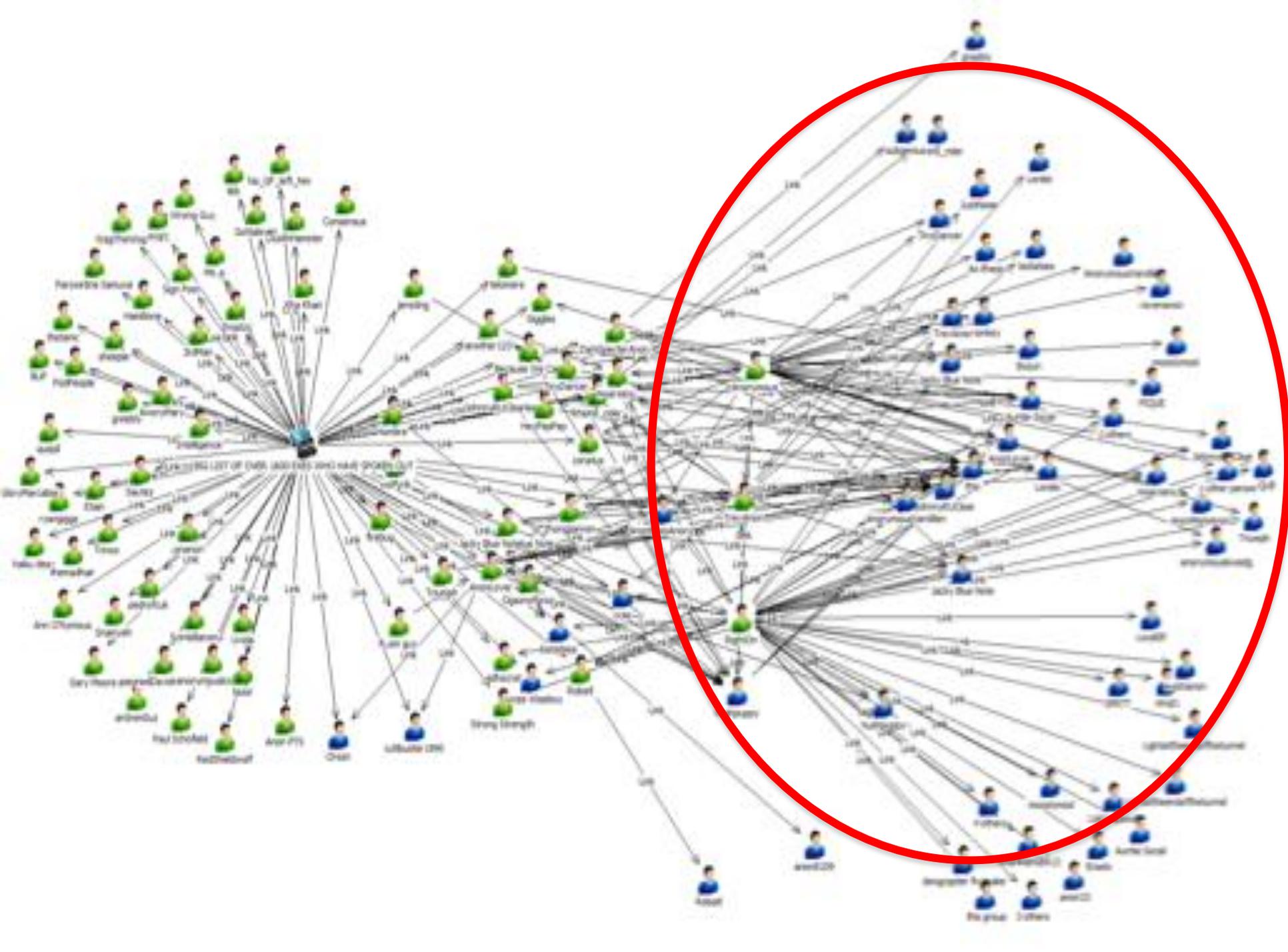
#1 Reply

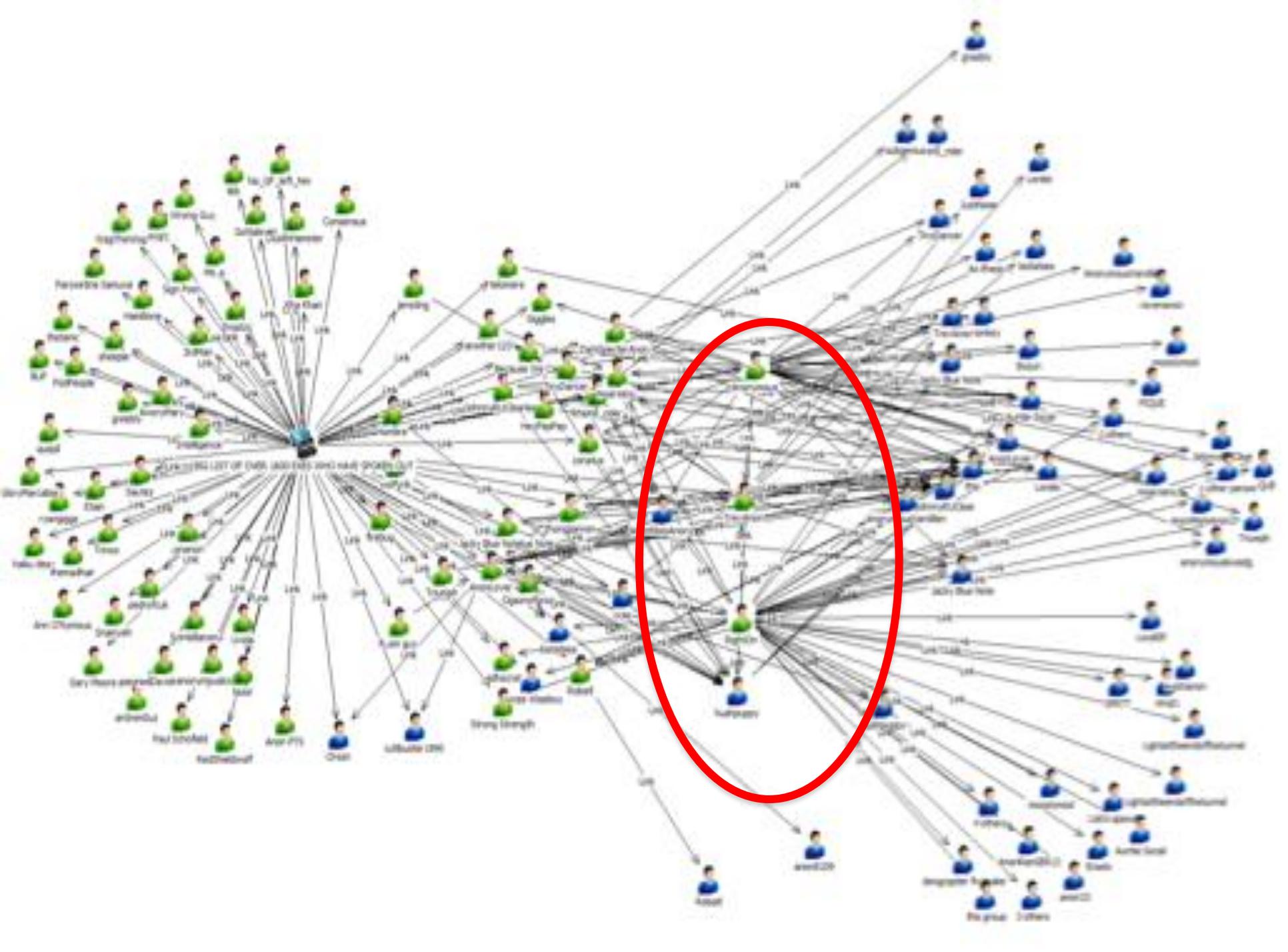
Anonymou Synapse and Nishimori like this.











RSA CONFERENCE 2012

FEBRUARY 27-MARCH 2 | MOSCON CENTER | SAN FRANCISCO

**Computer
Science Folk**

**Social
Science**

**Former
Military**

THE GREAT CIPHER
MIGHTIER
THAN THE SWORD



RSA CONFERENCE 2012

FEBRUARY 27-MARCH 2 | MOSCON CENTER | SAN FRANCISCO

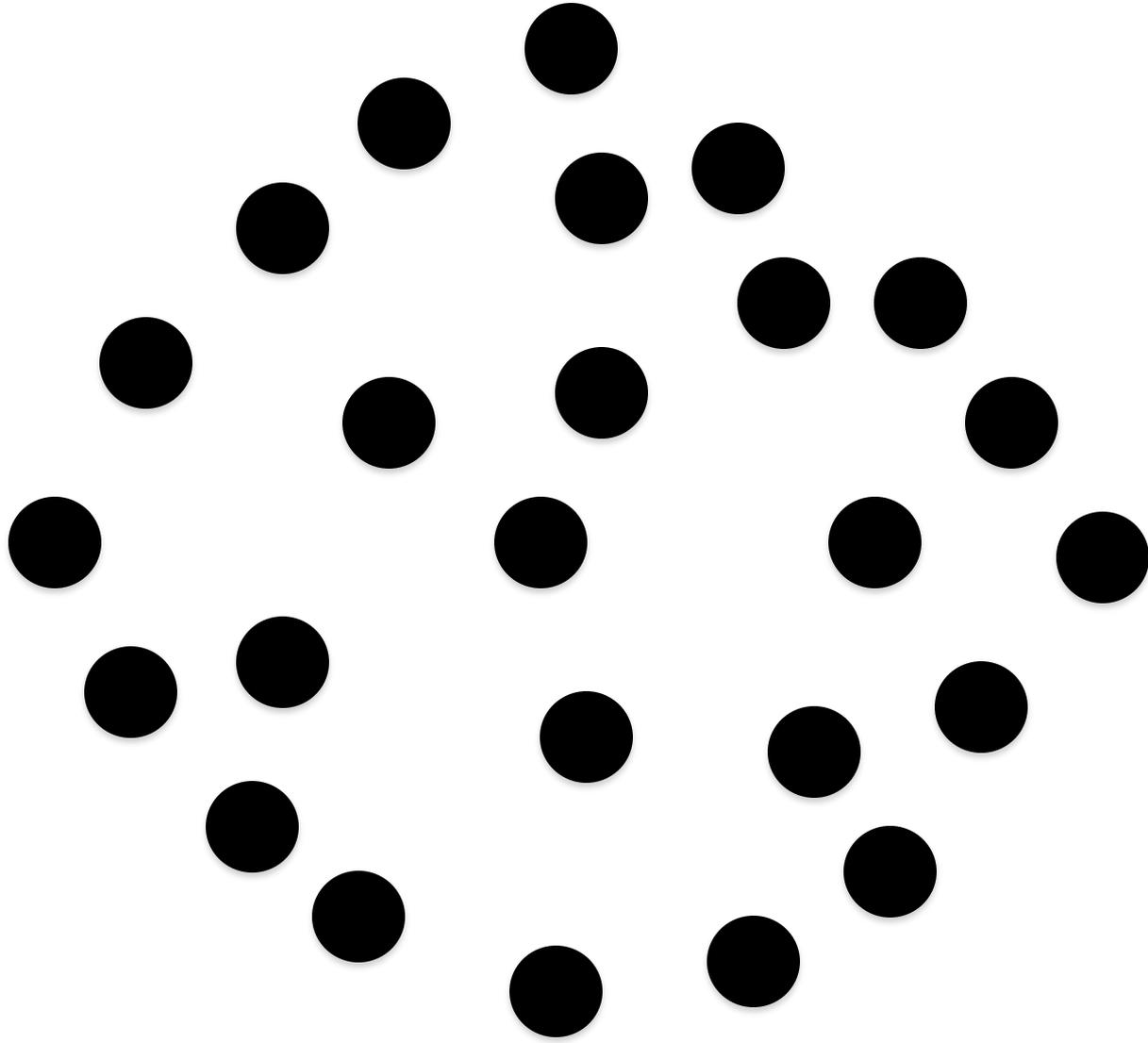
**Computer
Science Folk**

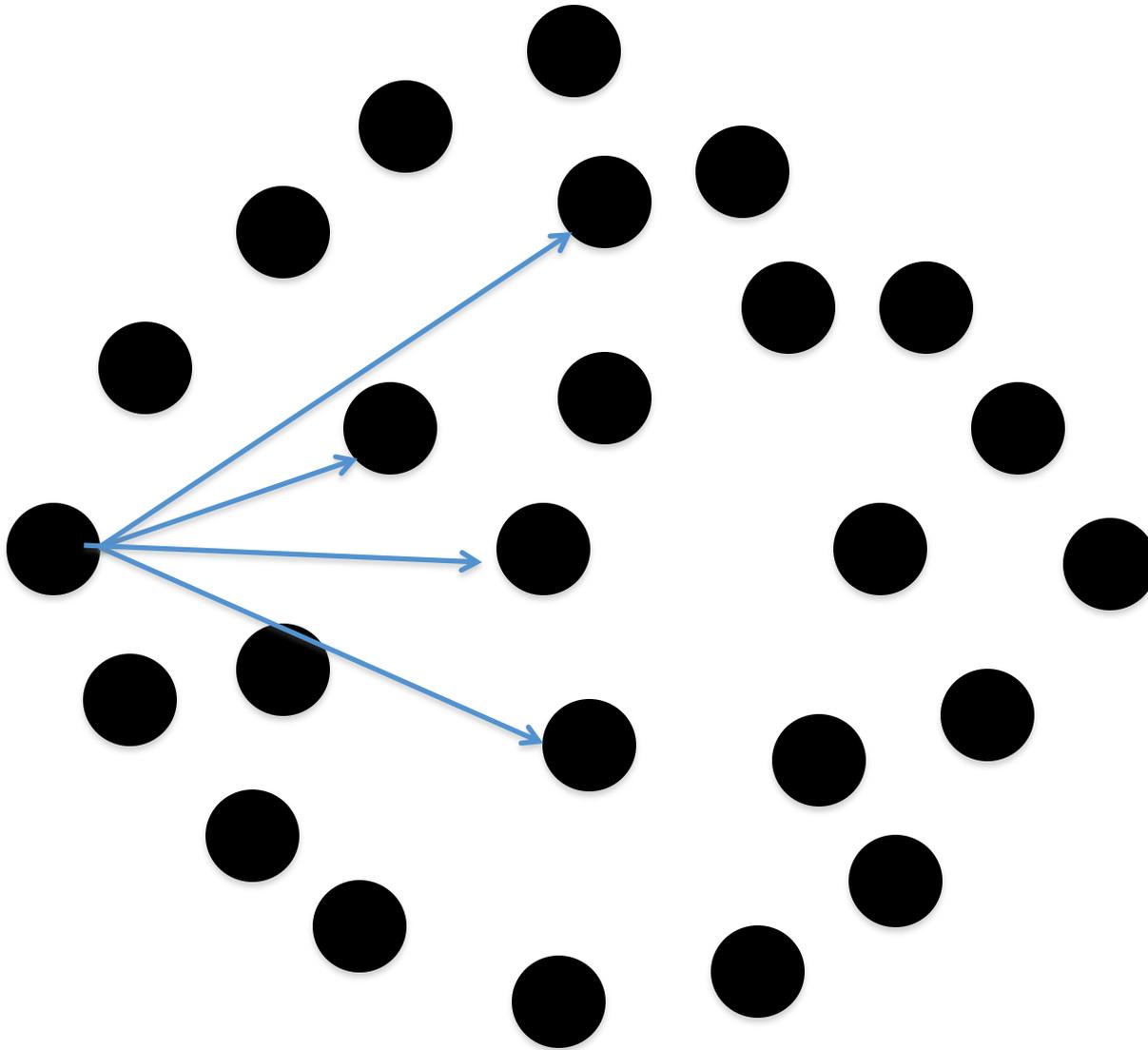
**Social
Science**

**Former
Military**

THE GREAT CIPHER
MIGHTIER
THAN THE SWORD

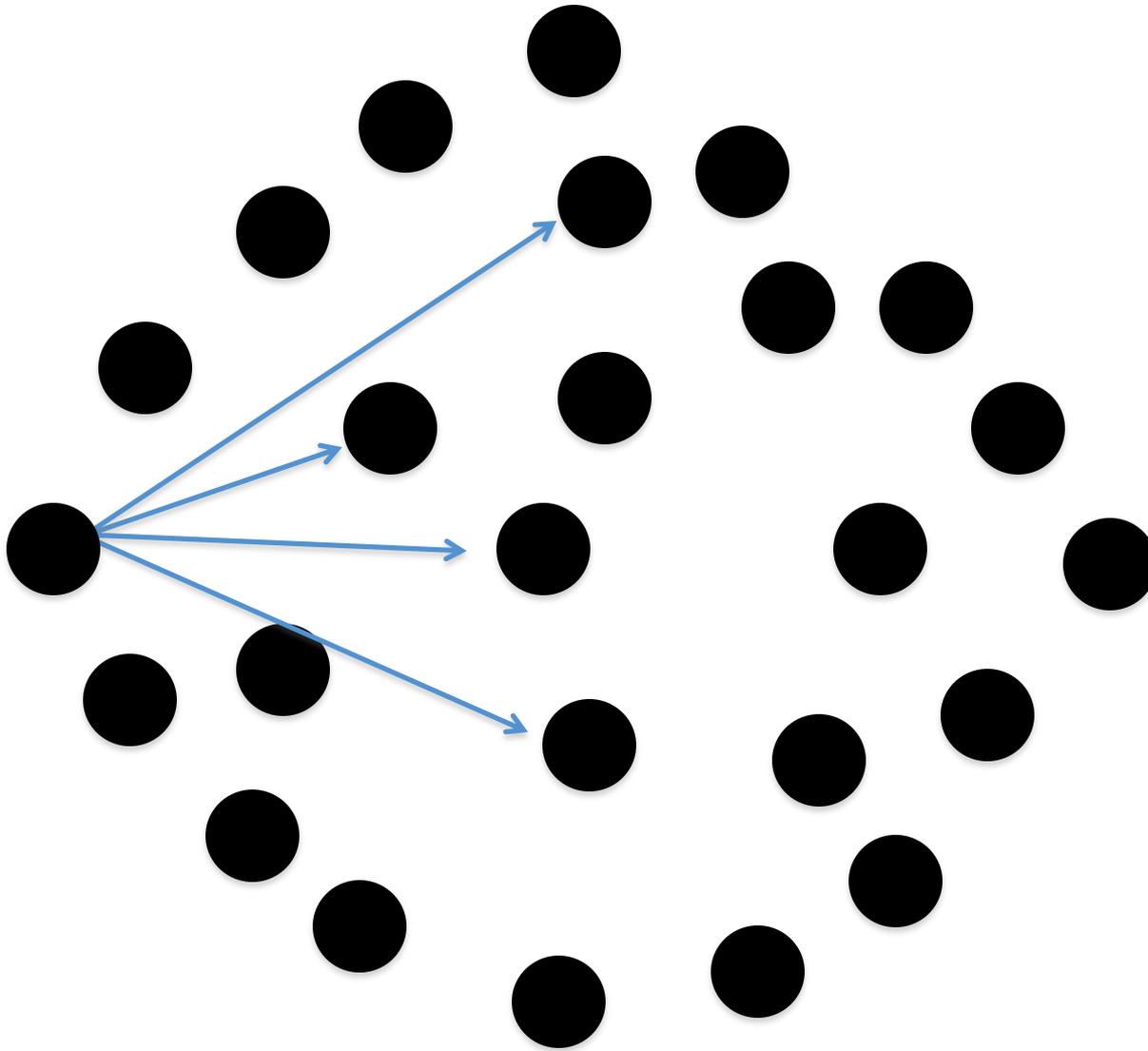




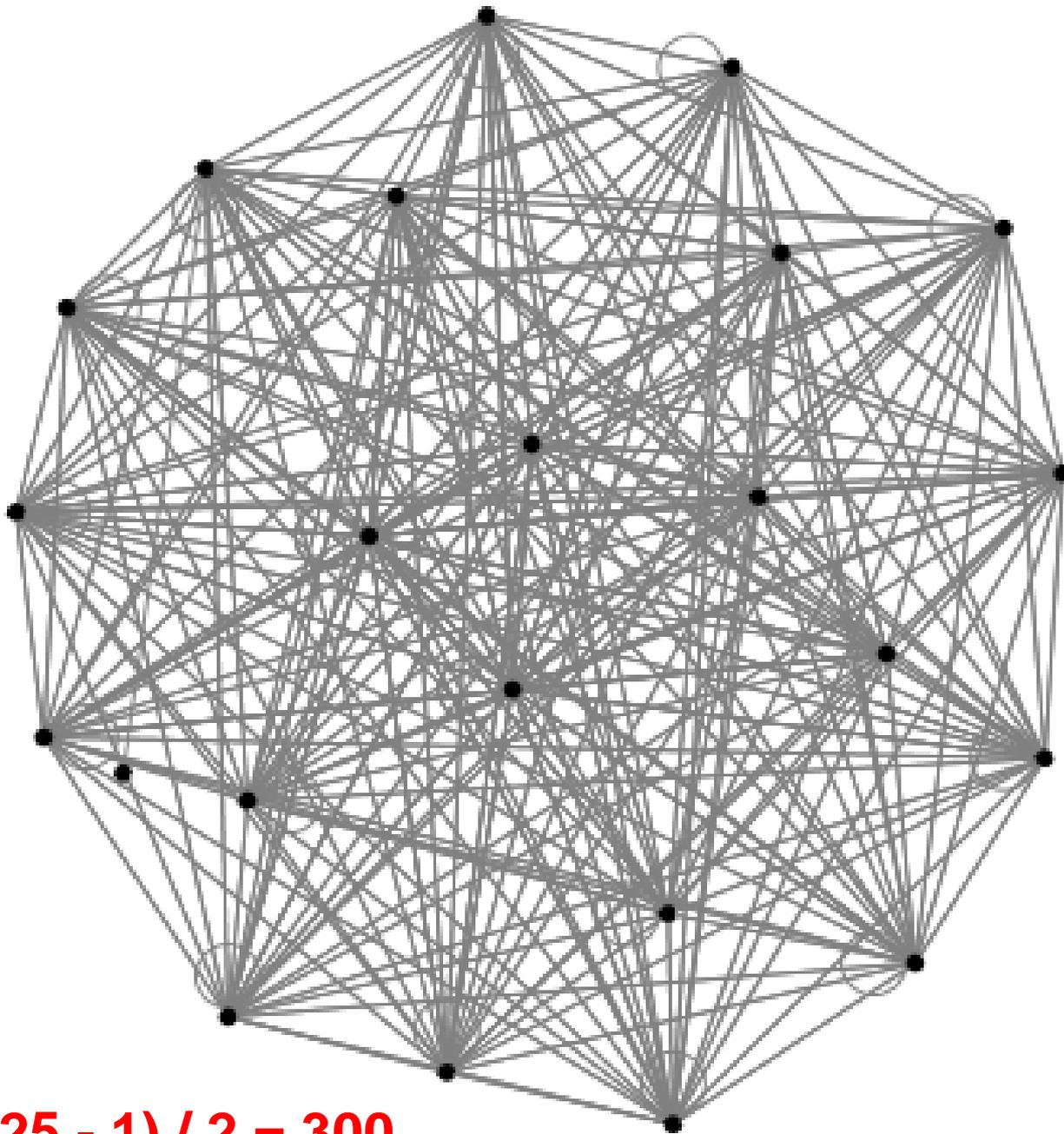


How many possible connections can be made within this group?

Clustering Coefficient



$$N * (N - 1) / 2$$

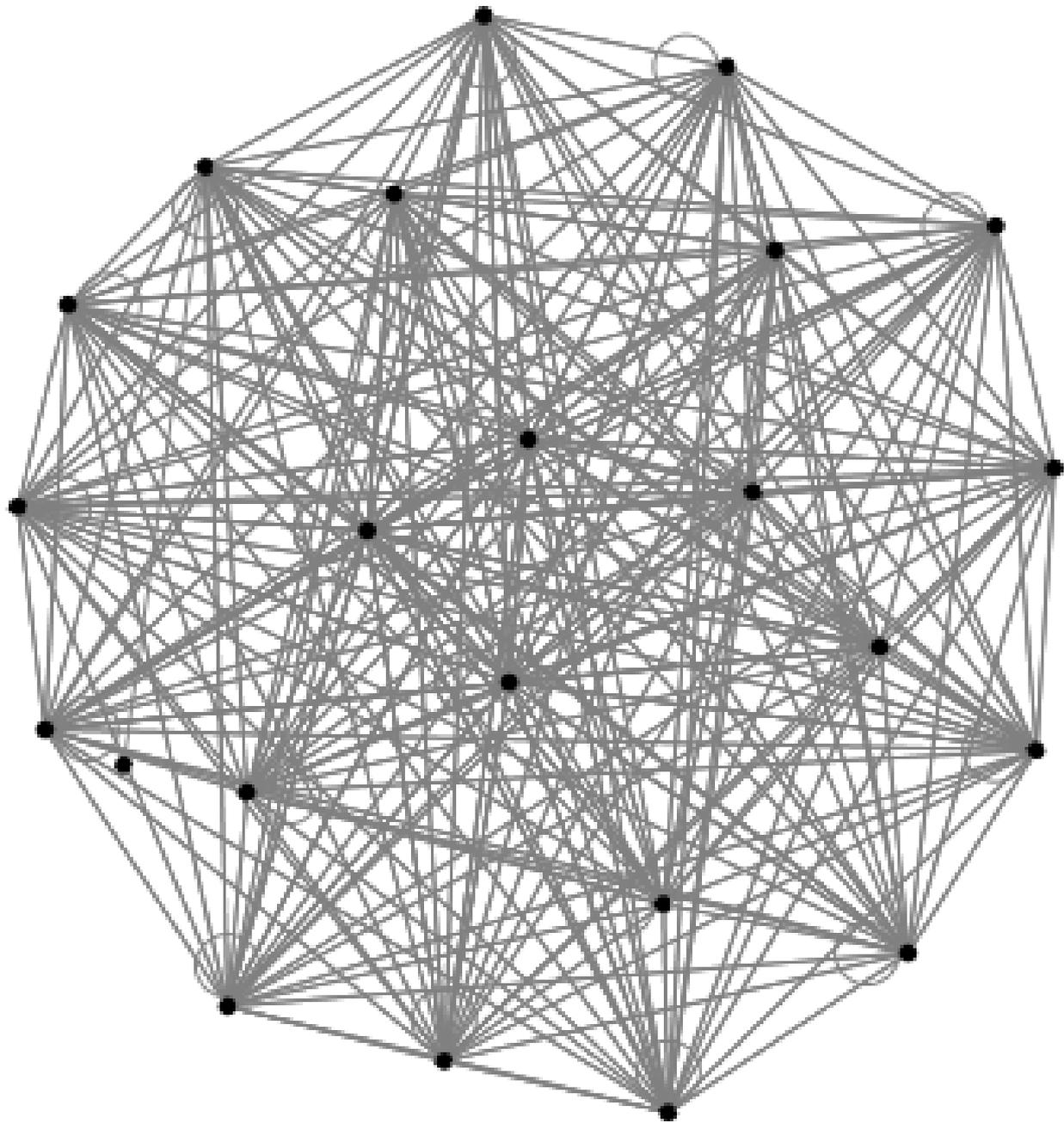


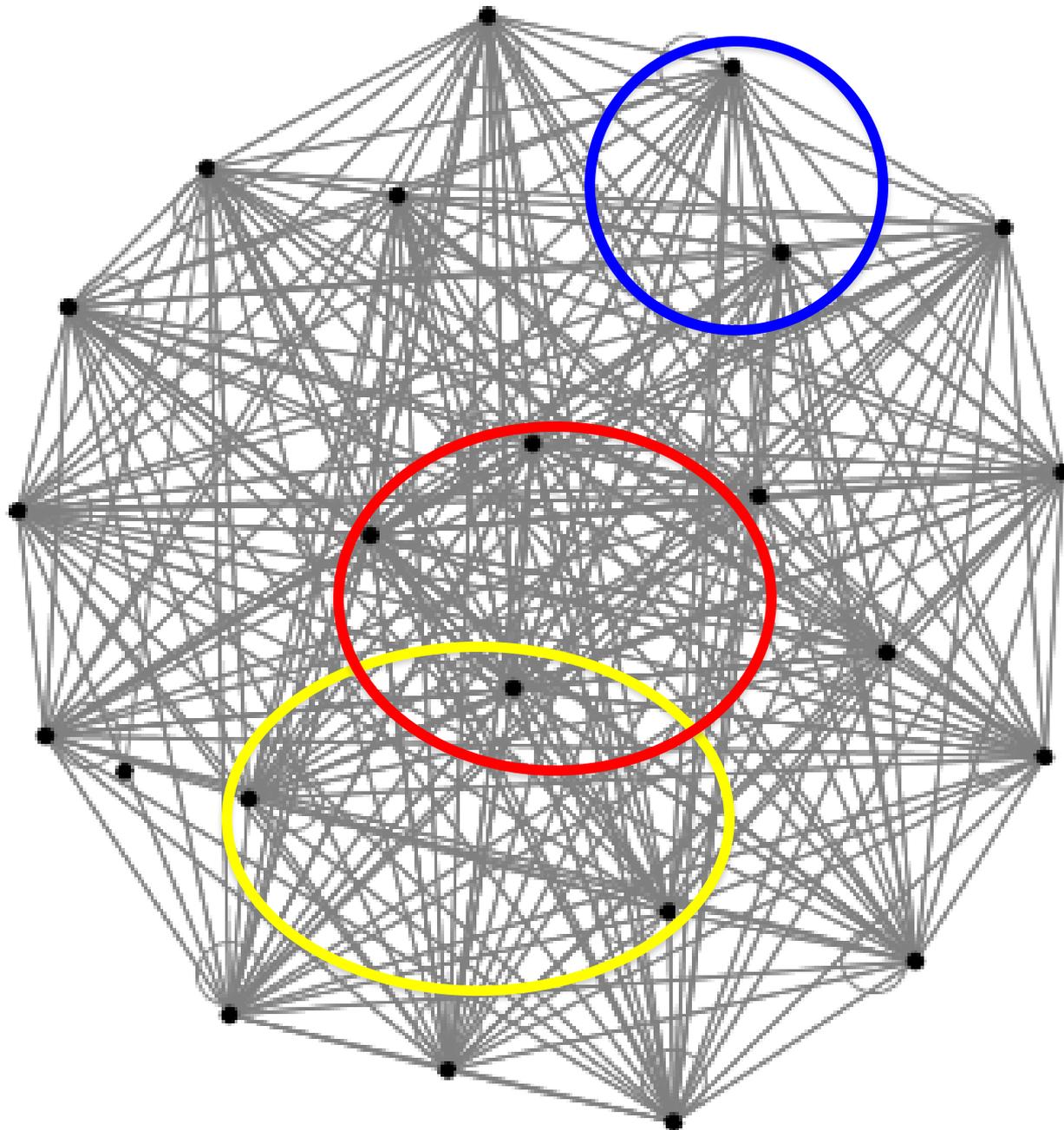
$25 * (25 - 1) / 2 = 300$

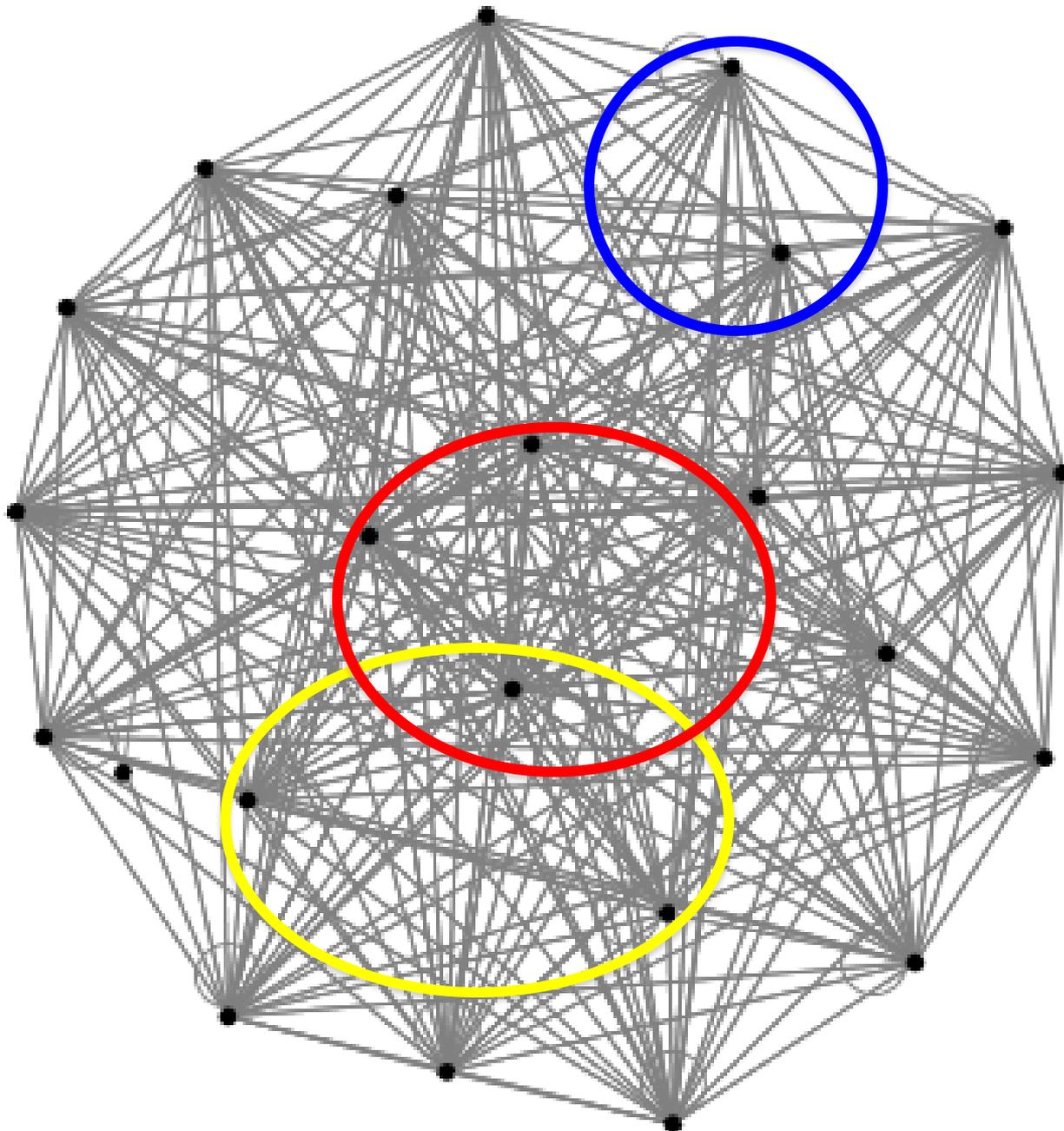
However...consider this

- John P. Reed
- the utility of large networks, particularly social networks, can scale exponentially with the size of the network.









33 Million possible combinations!!!!!!!!!!



How many free SIMs would you like?

I'd like Surname

First name Email I agree to the [terms & conditions](#)

Terms Apply.

7745 users lag: 221ms

IRC: 1

[Login](#) | [Create an account](#)

HACKERS UNITE AGAINST CORRUPTION ALL OVER THE WORLD! || READ: <http://is.gd/8aoGqD> || Got any info/leaks? /msg any SOP (&) in channel || <http://thepiratebay.org/user/AntiSec>

11:26 zerodivision 😊

11:26 Th3-5p3ctr3 Nothing worth doing is easily accomplished.

11:26 ti 😊

11:26 ti this is true

11:26 anonArc Th3-5p3ctr3, who said that ?

11:26 ti not even fapping

11:26 Th3-5p3ctr3 DDoSing stuff is easy too, and you see what little that's accomplished besides a few kids getting v&

11:26 zerodivision but no local stations.. I hope were talking CNN, BBC etc...

11:27 proSI Brb

11:27 Th3-5p3ctr3 anonArc: Damned if I remember or I'd give them credit. 😞

11:27 ti it'd be cool to do stuff like captain midnight style

11:27 anonArc lol 😊

11:27 *** random quit (Connection closed)

11:27 ti or the max headroom hack

11:27 *** proSI quit (Quit: used jmlrc)

11:27 anonArc ti, YES 🎉

11:27 Th3-5p3ctr3 Besides, wouldn't be too hard with the right insider...

11:27 anonArc they never found him you know

11:27 ti lol yeah and he was totally nuts 🍷

11:27 *** dip quit (Connection closed)

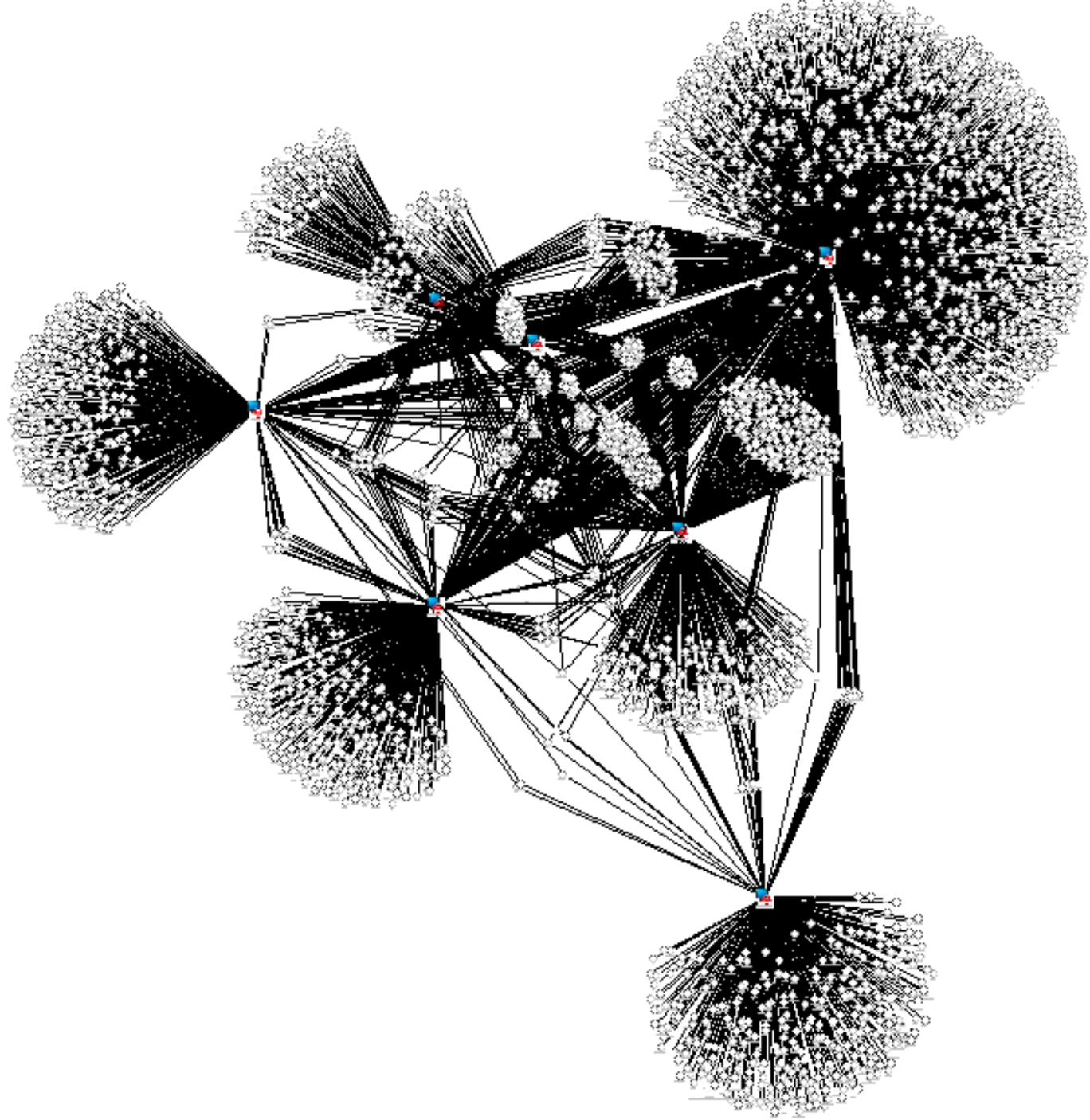
11:28 *** BlackHaT quit (Ping timeout: 121 seconds)

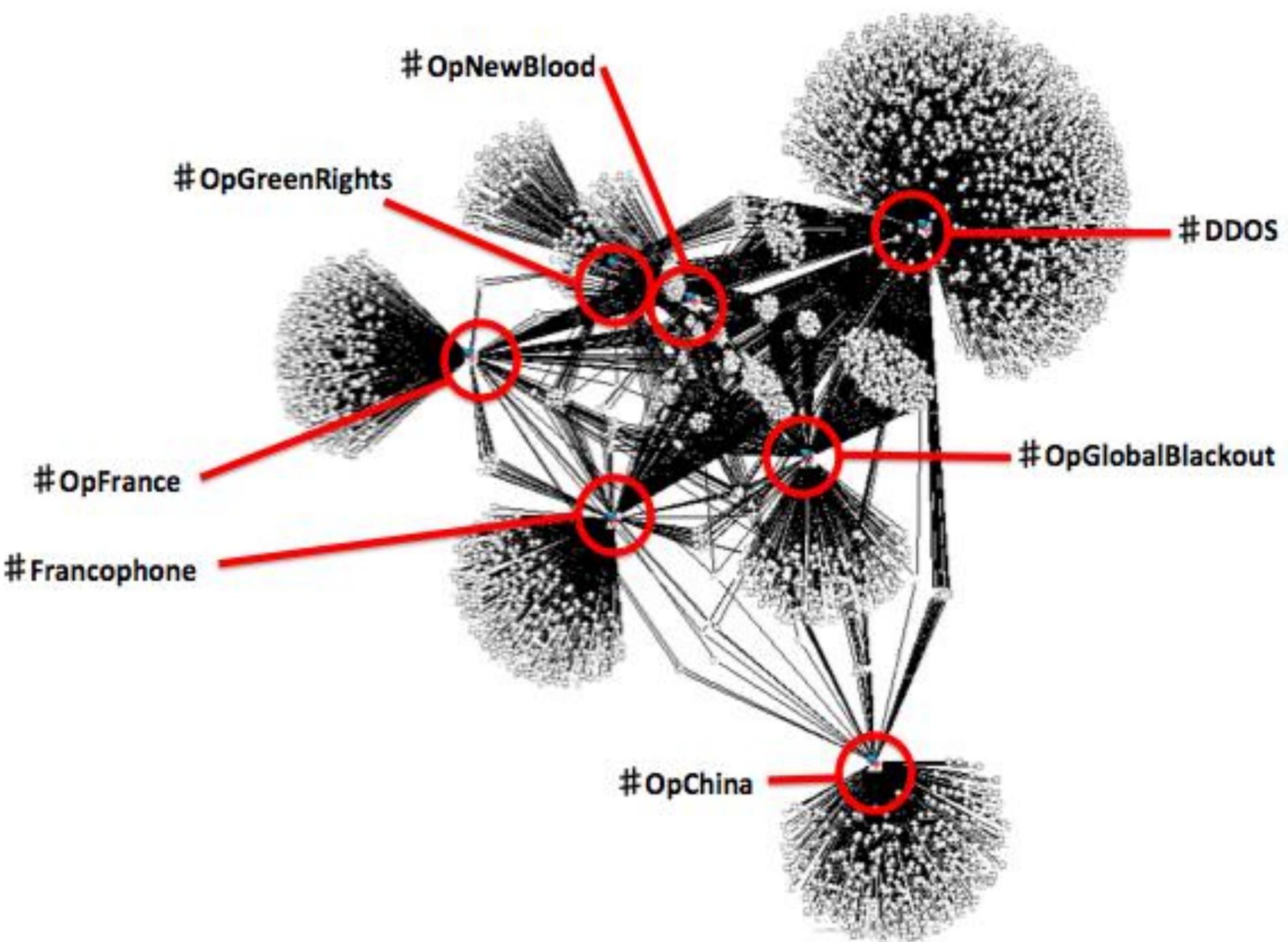
Chatting

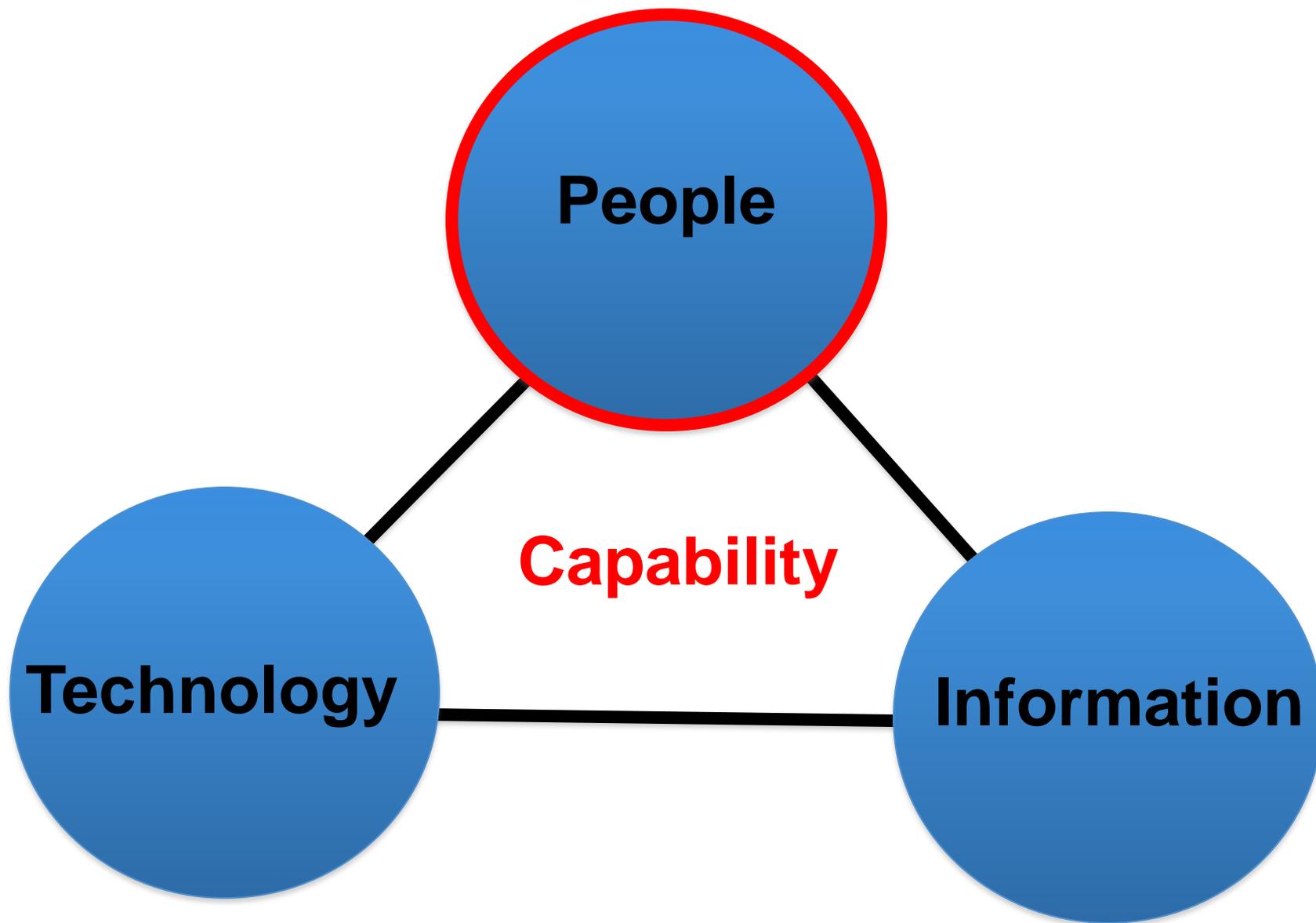
- InformationTero
- storm ⭐
- Effexor 🗣
- Troy 🗣
- anonArc
- Drefsab
- Th3-5p3ctr3
- ti
- zerodivision

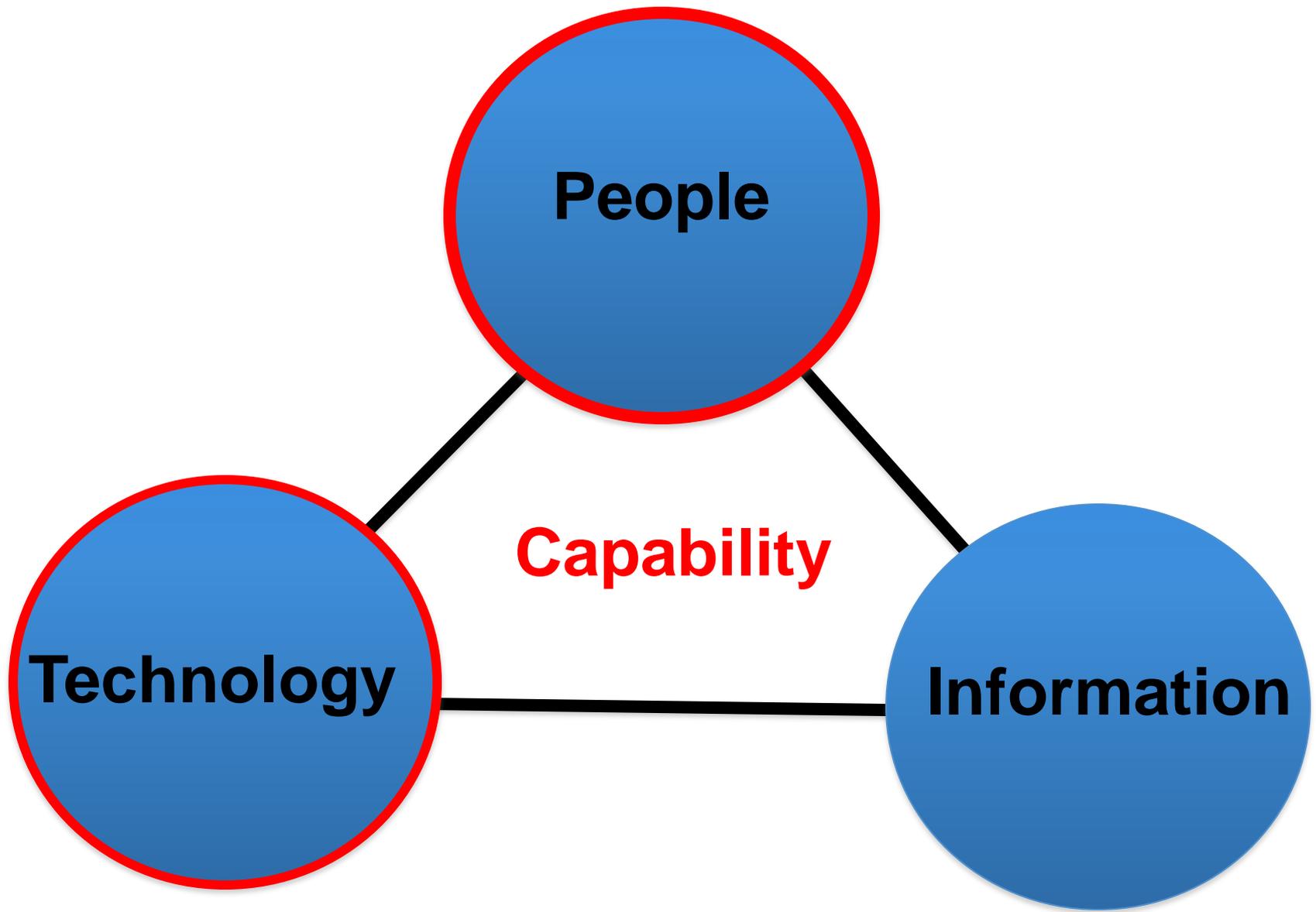
Idlers

- marduk 🏠
- Lulzboat 🗣
- rum 🗣
- Sabu 🗣
- daboogieman ⭐
- f[x] ⭐
- GlomeX ⭐
- jester ⭐
- joepie91 ⭐
- p2a ⭐
- shift ⭐
- someloser ⭐
- Fox 🗣
- mr[a] 🗣
- Nijaxor 🗣
- selket 🗣



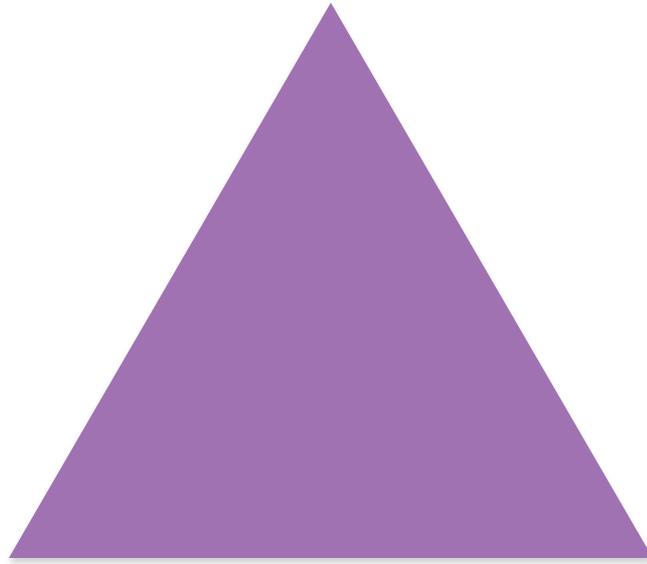




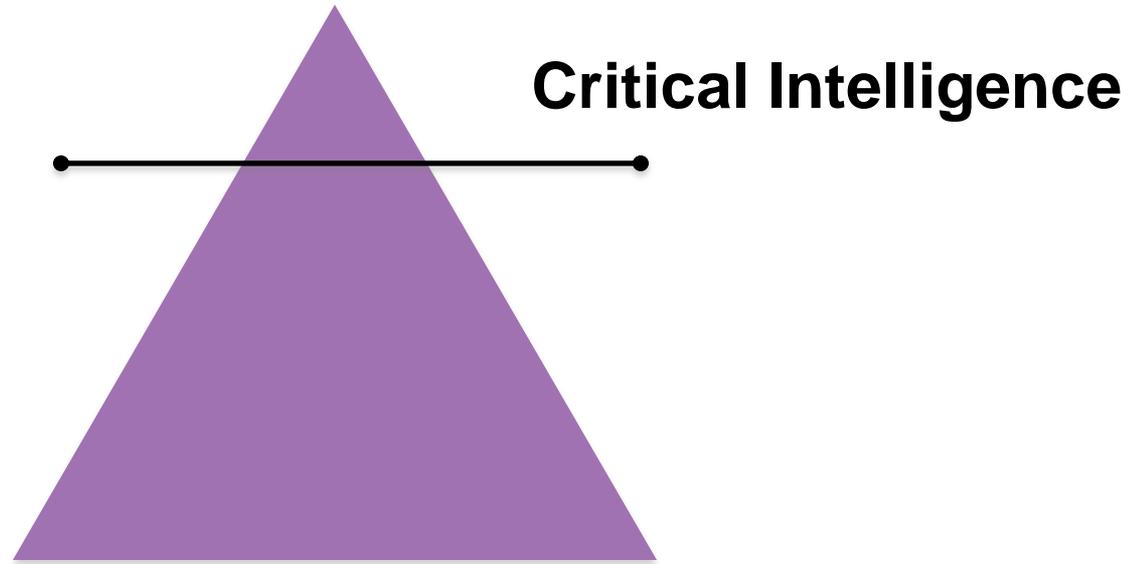




Levels of Intelligence product



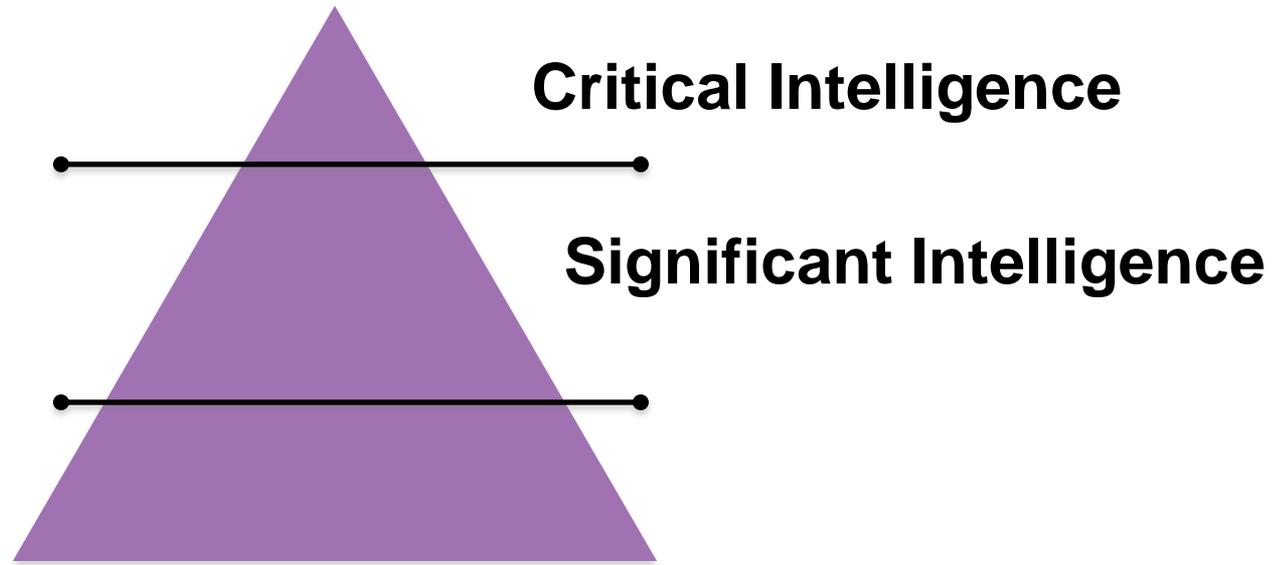
Levels of Intelligence product



“Mr President the missiles are in flight!”



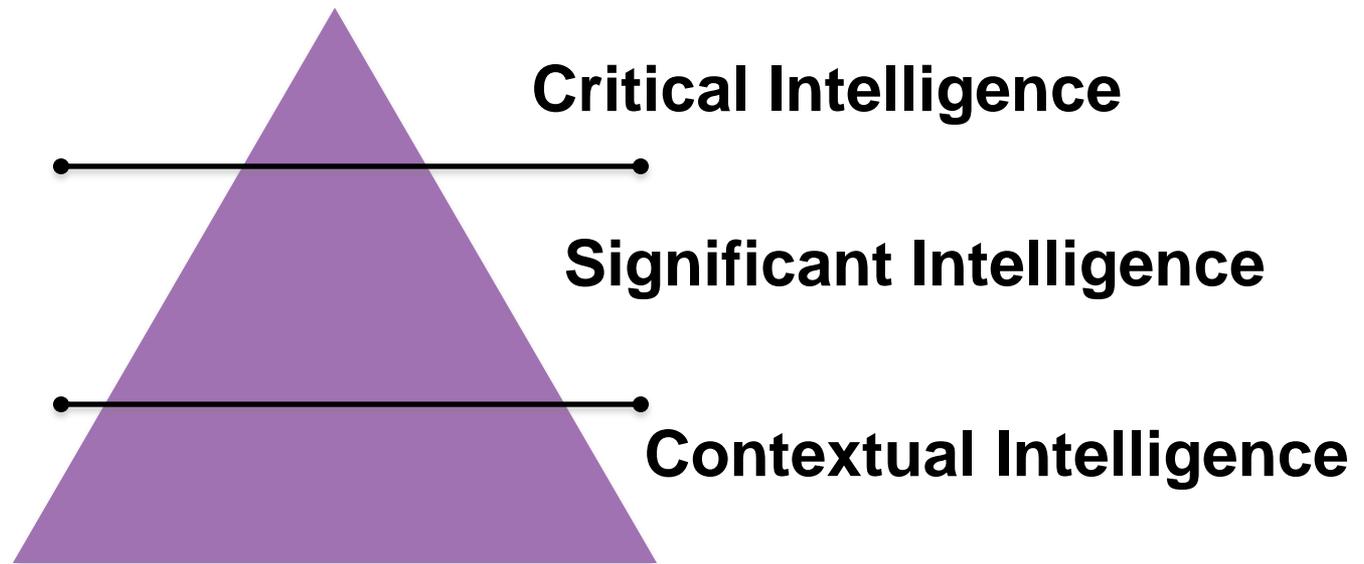
Levels of Intelligence product



“Iran may be developing a nuclear weapons capability ”



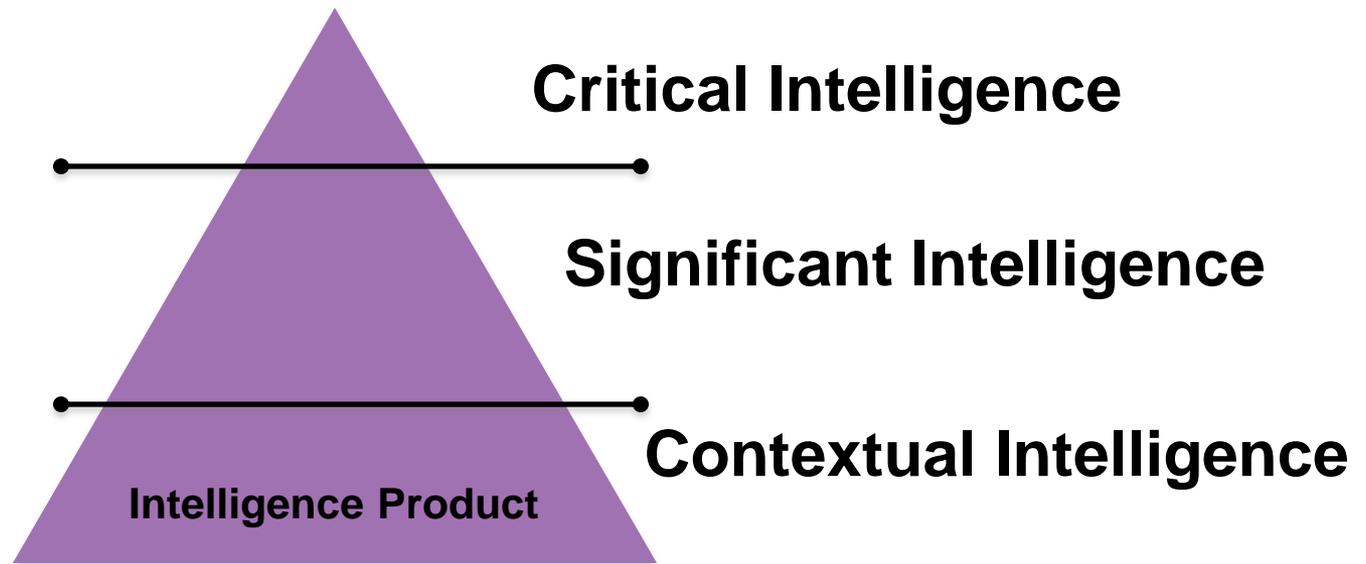
Levels of Intelligence product



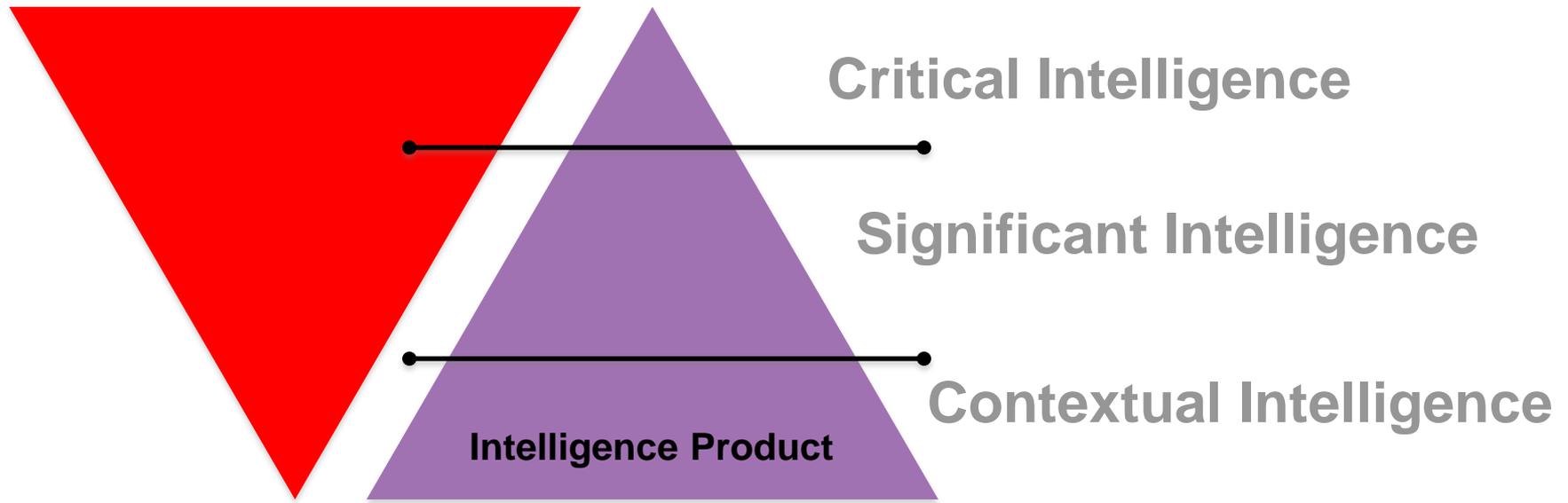
“Country X’s long term political goals could bring us into conflict with them in the next 20 years”



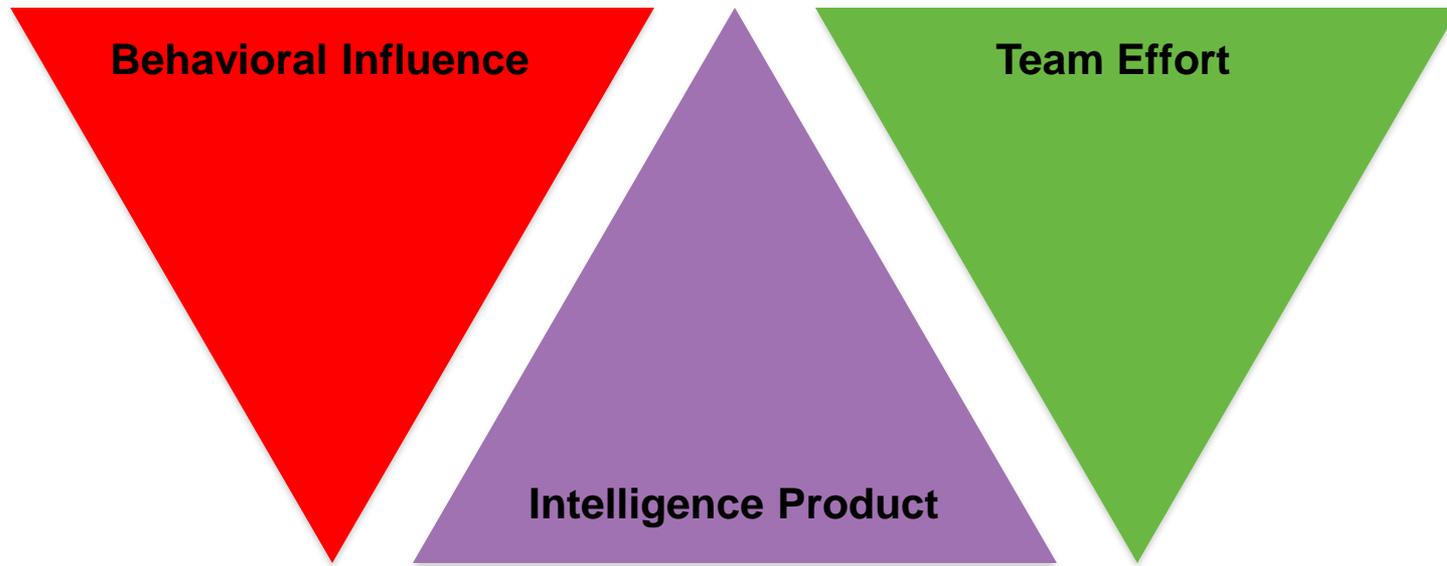
Levels of Intelligence product



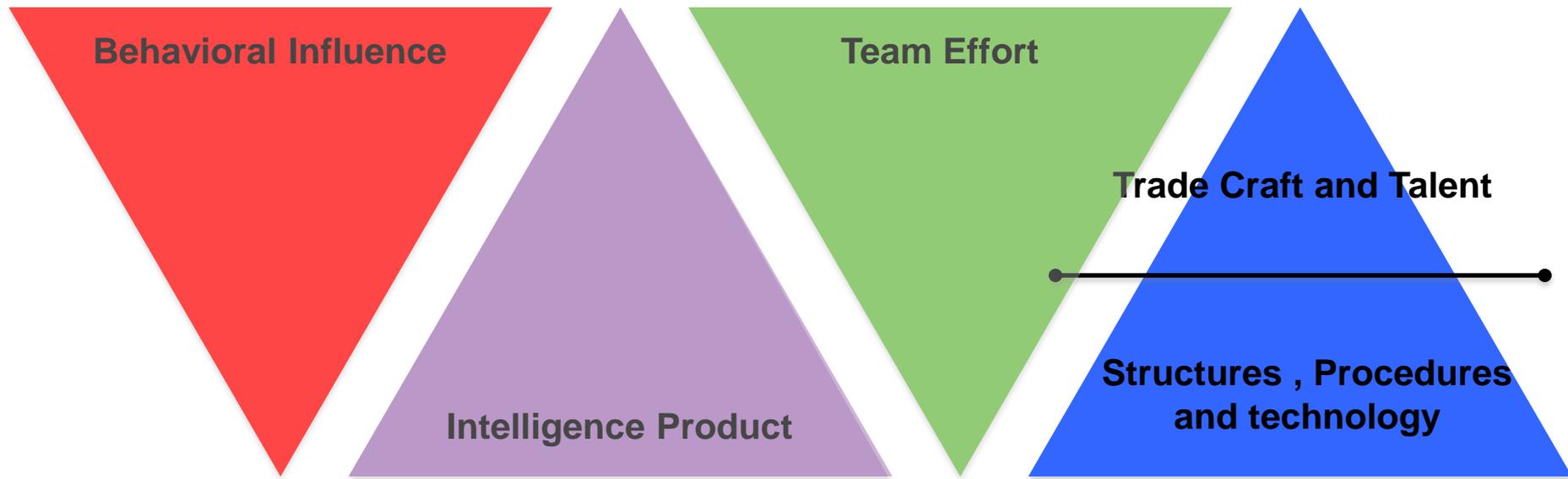
Change In Behavior Within The Decision Maker

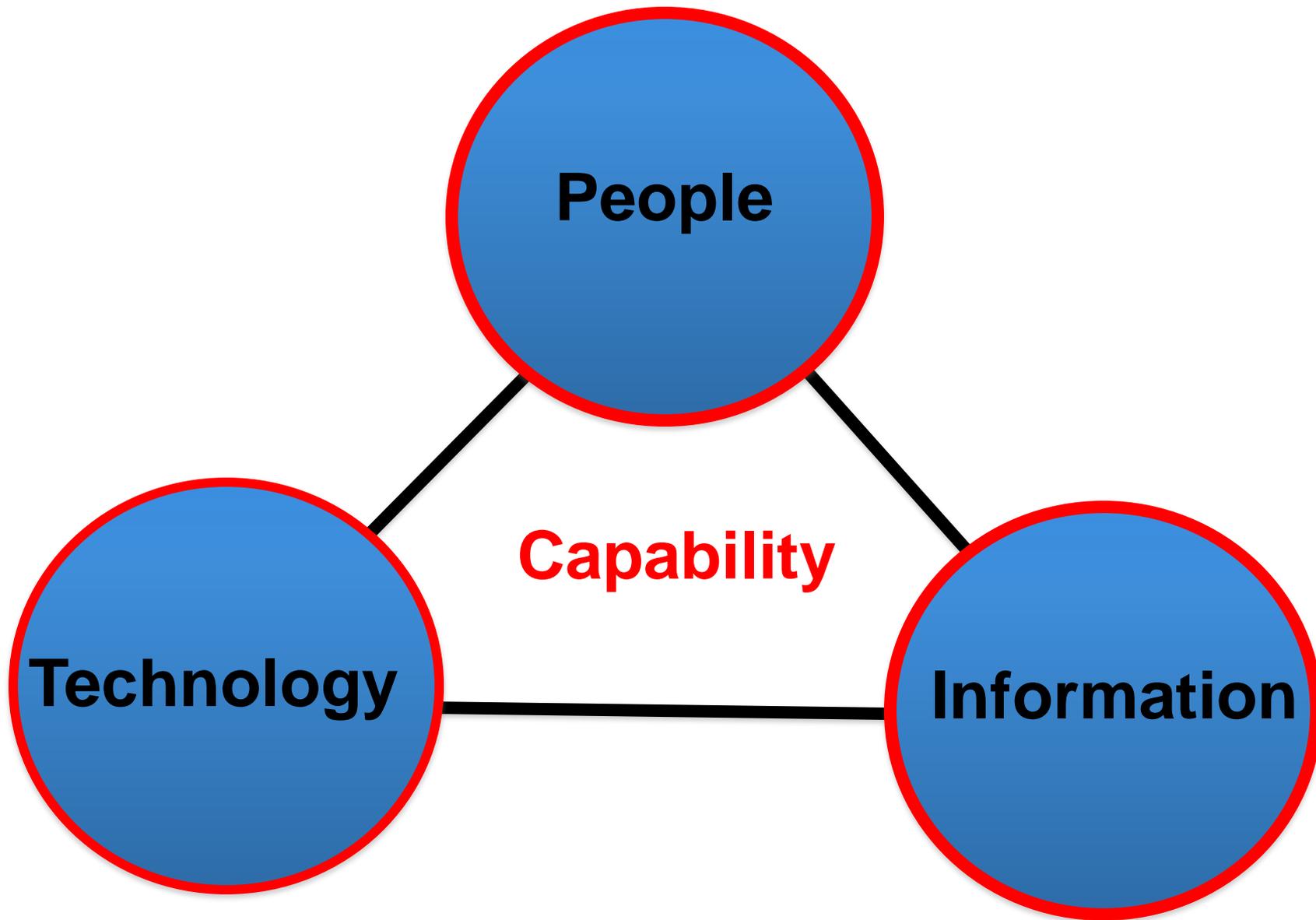


Direct Levels of Intelligence Team Effort



Technical Automaton VS Human Talent





Intelligence

Information

Data

Intelligence

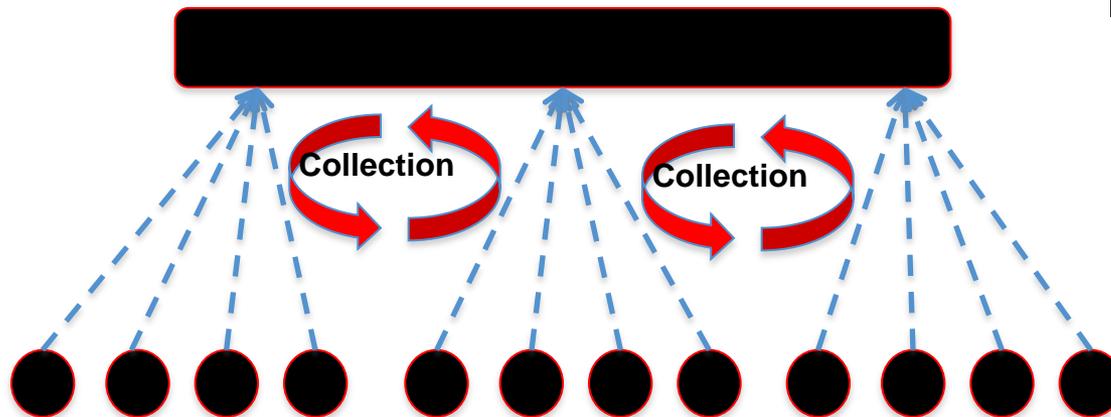
Information

Data

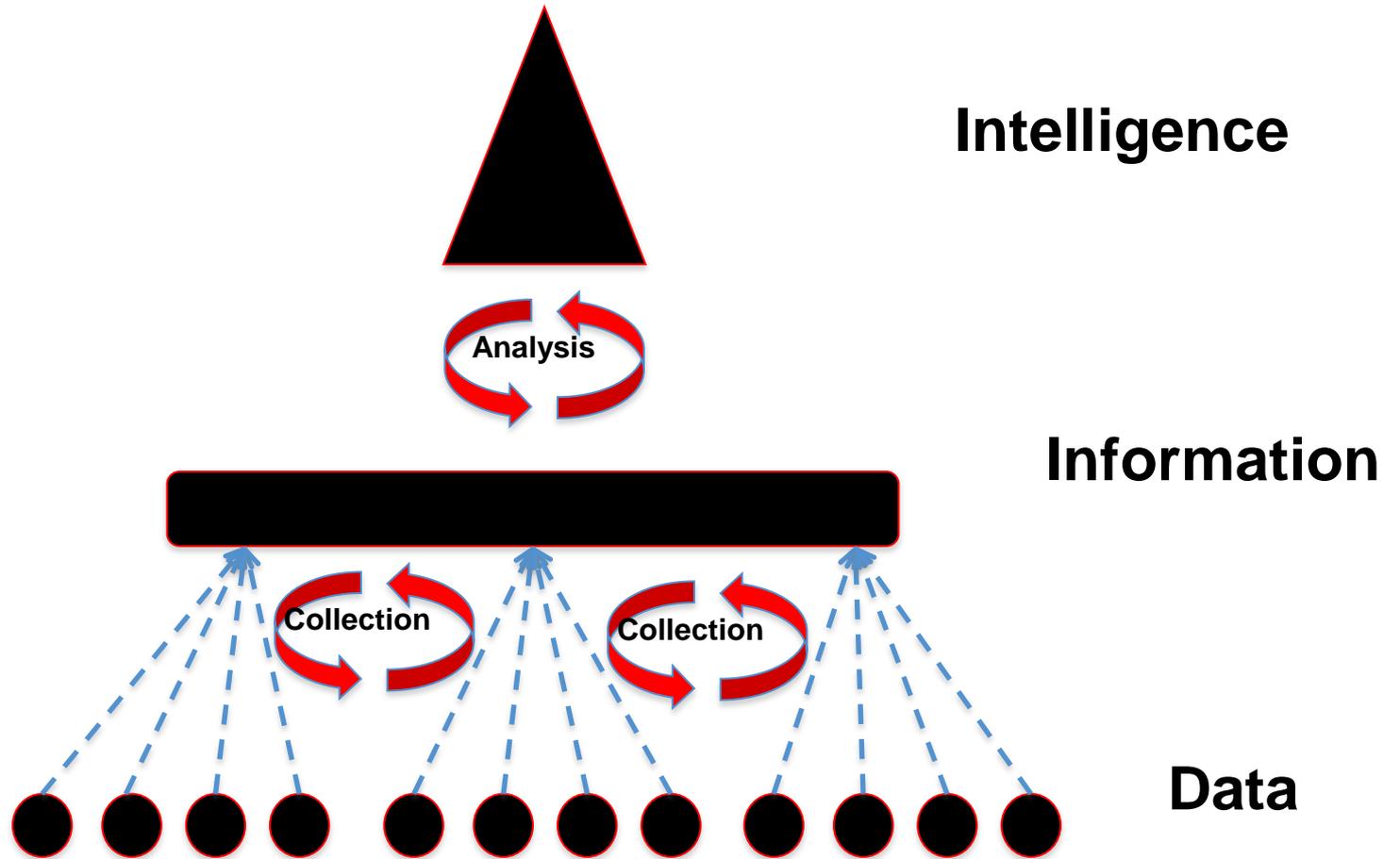


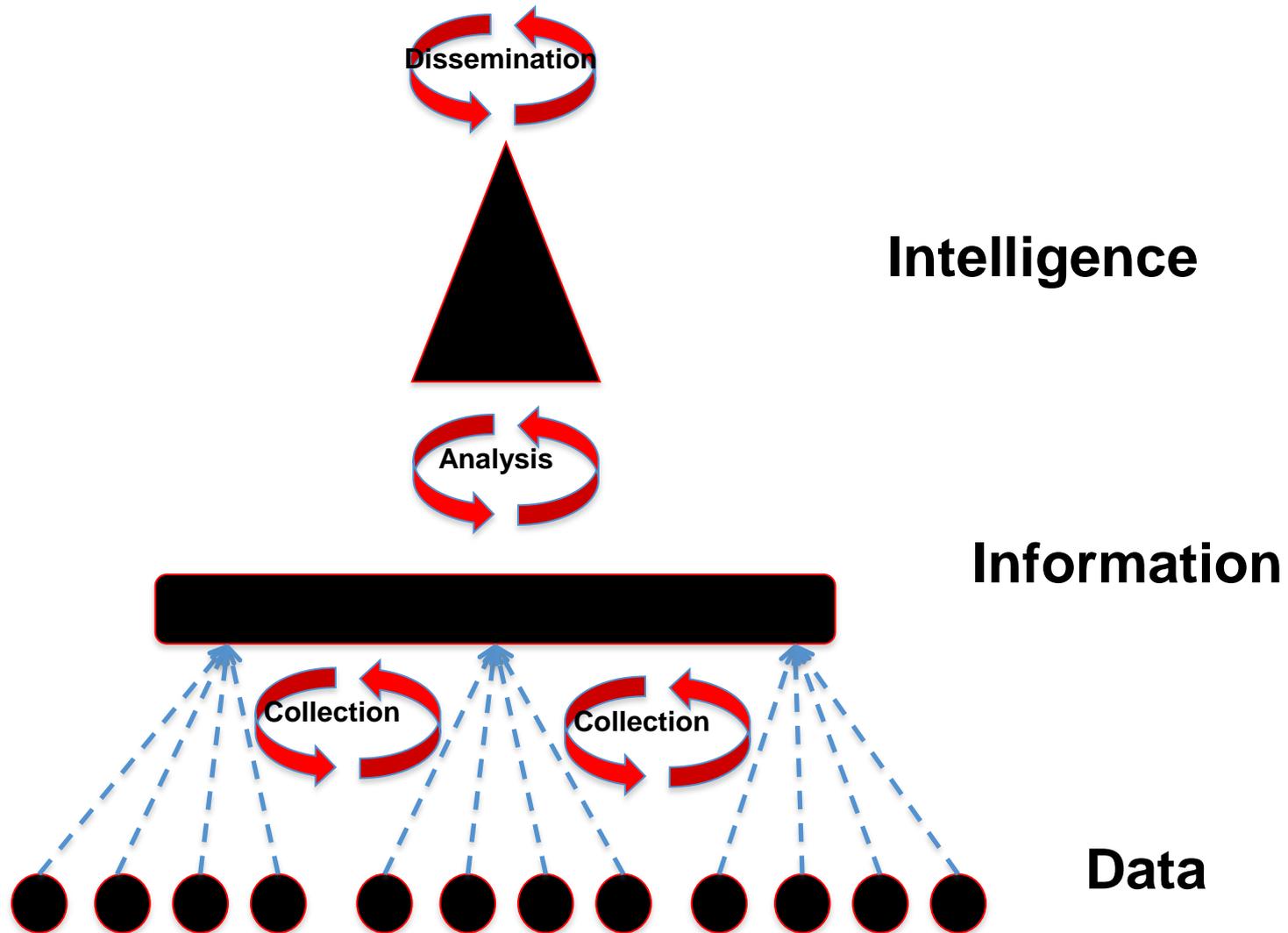
Intelligence

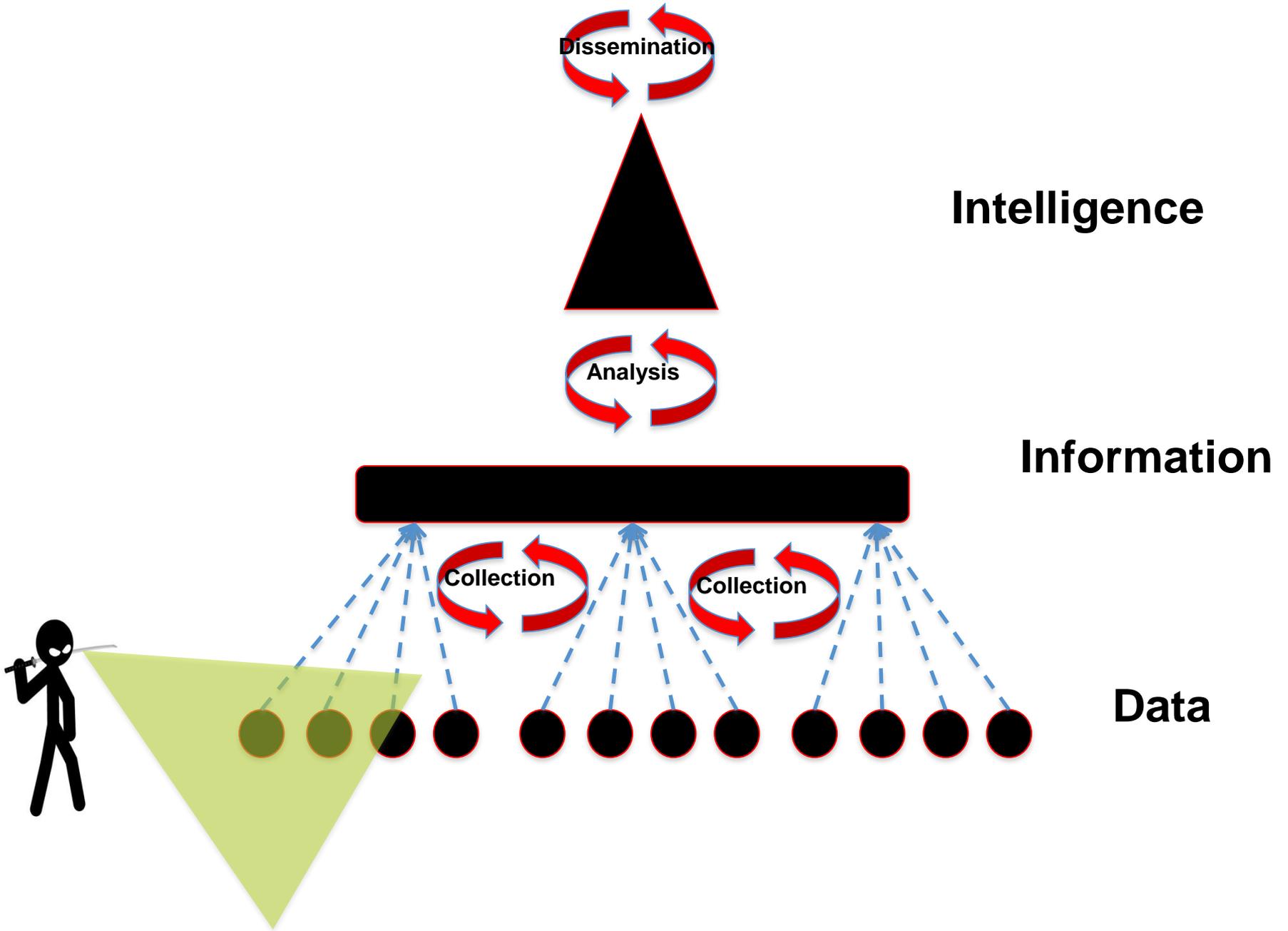
Information

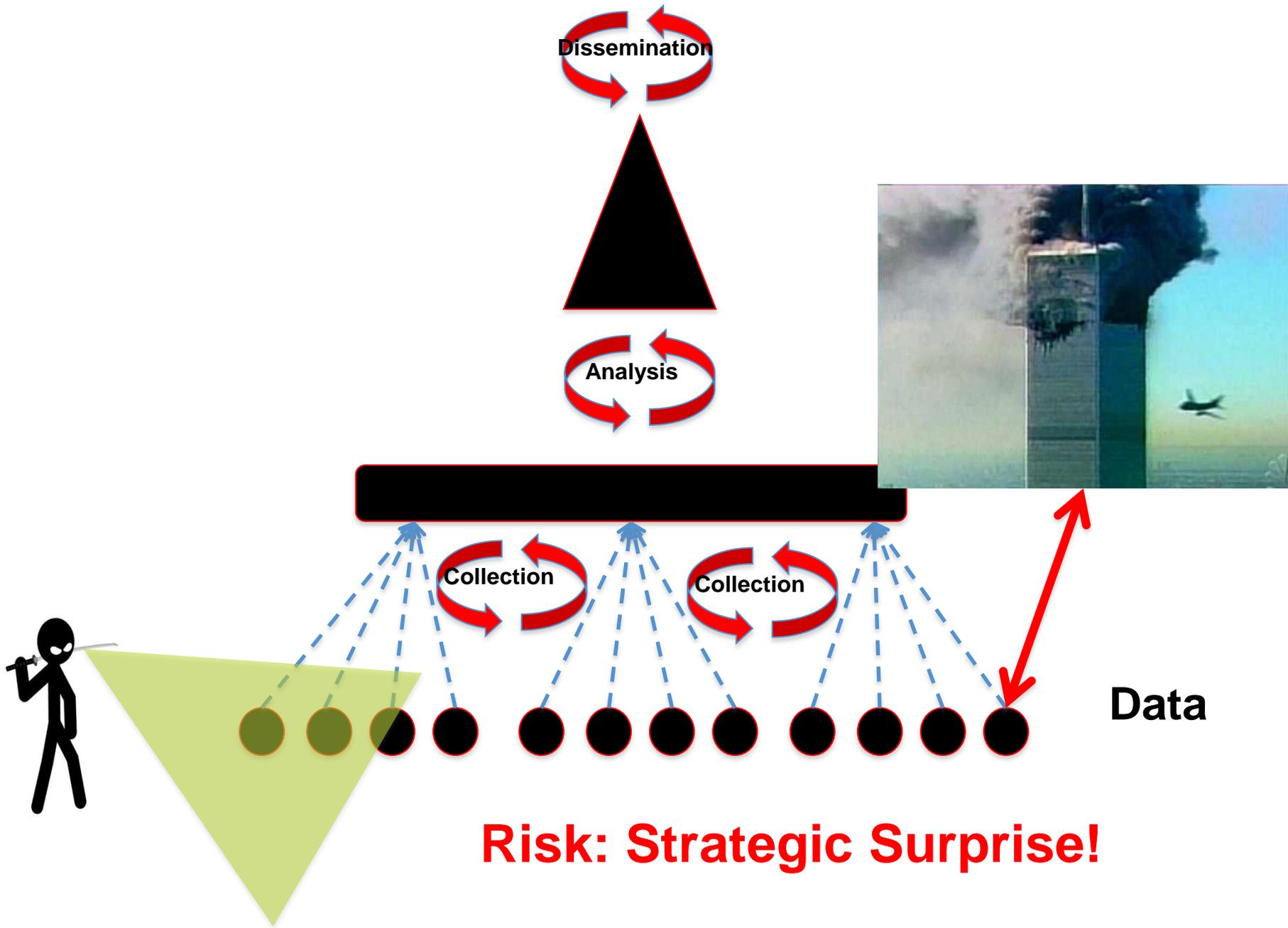


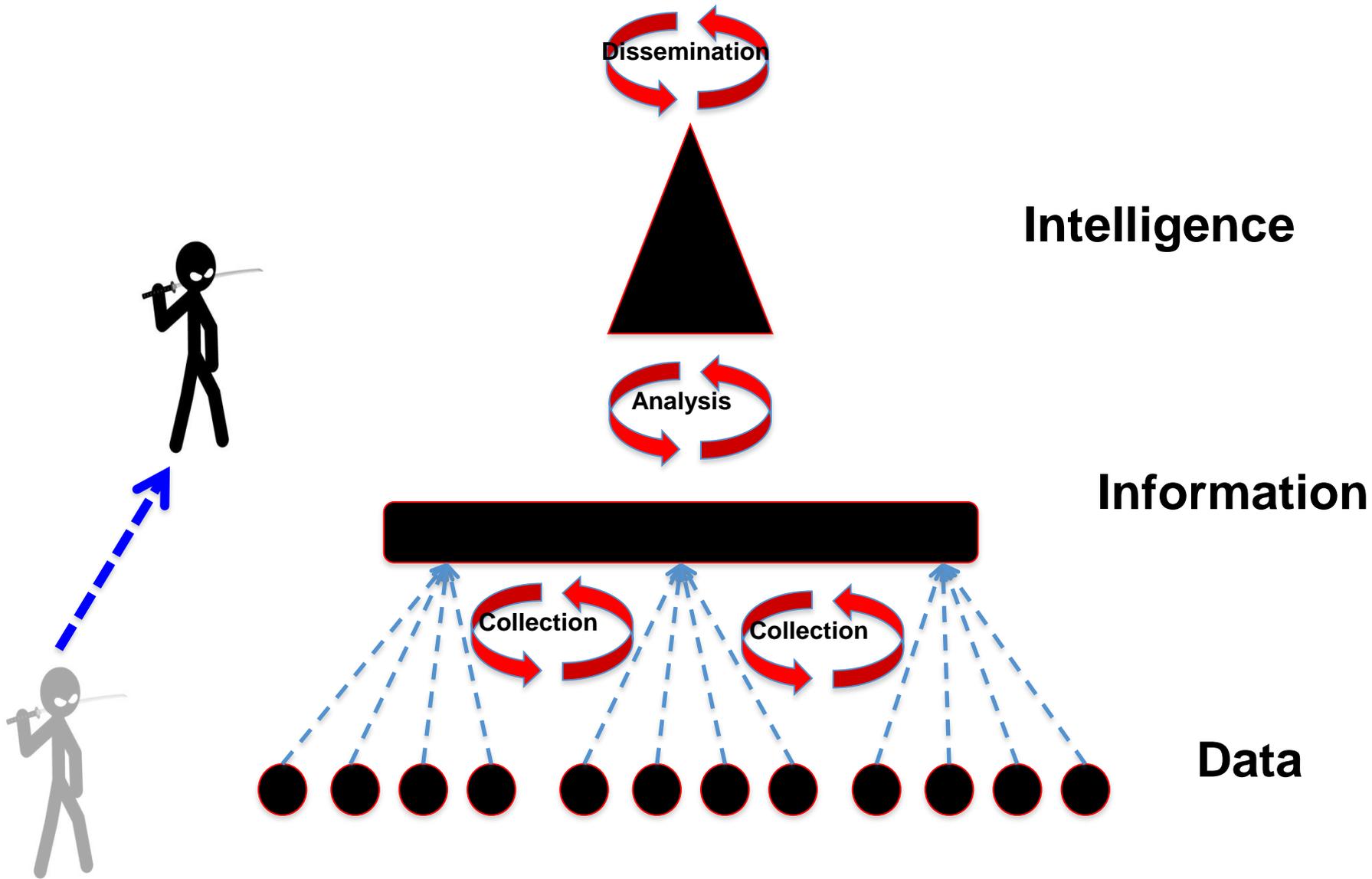
Data



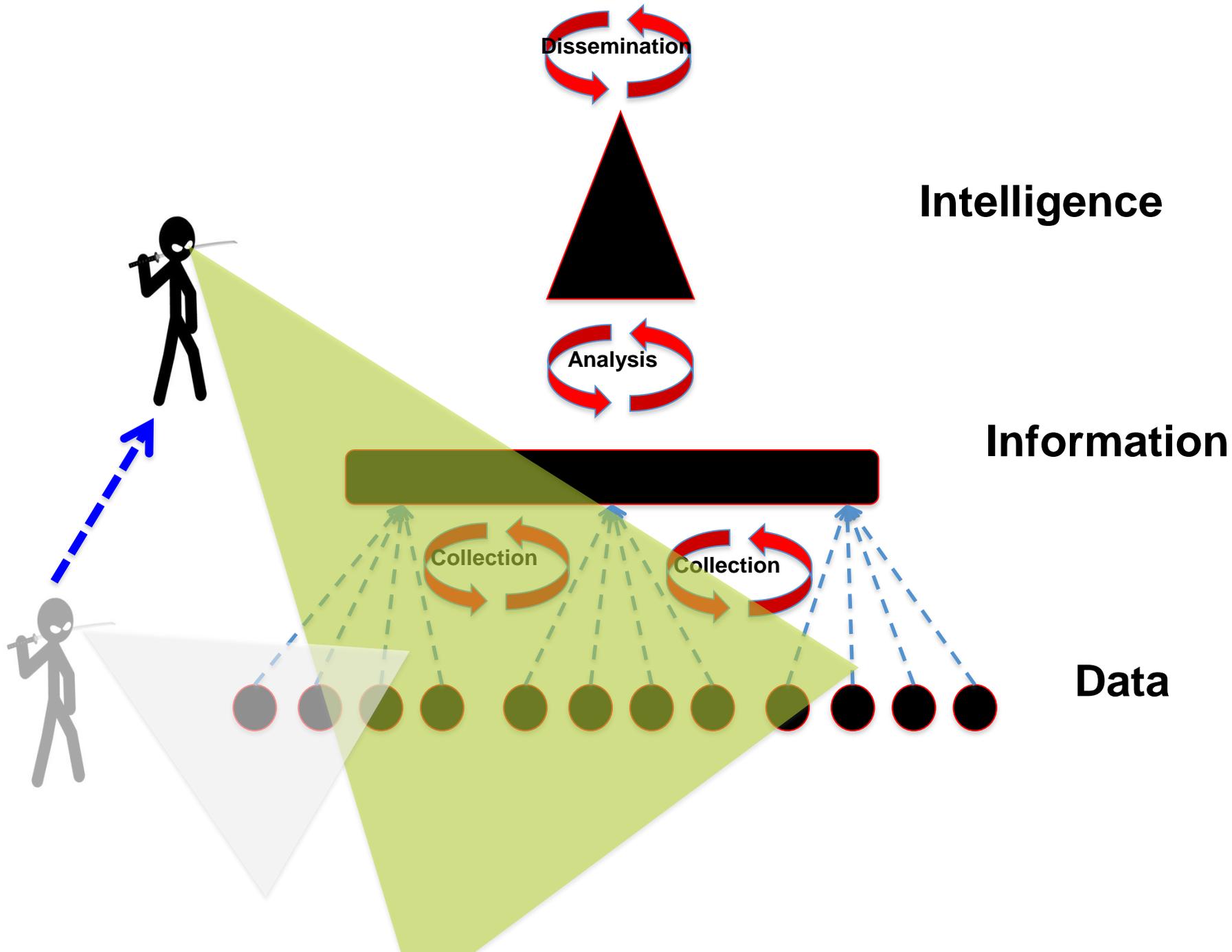


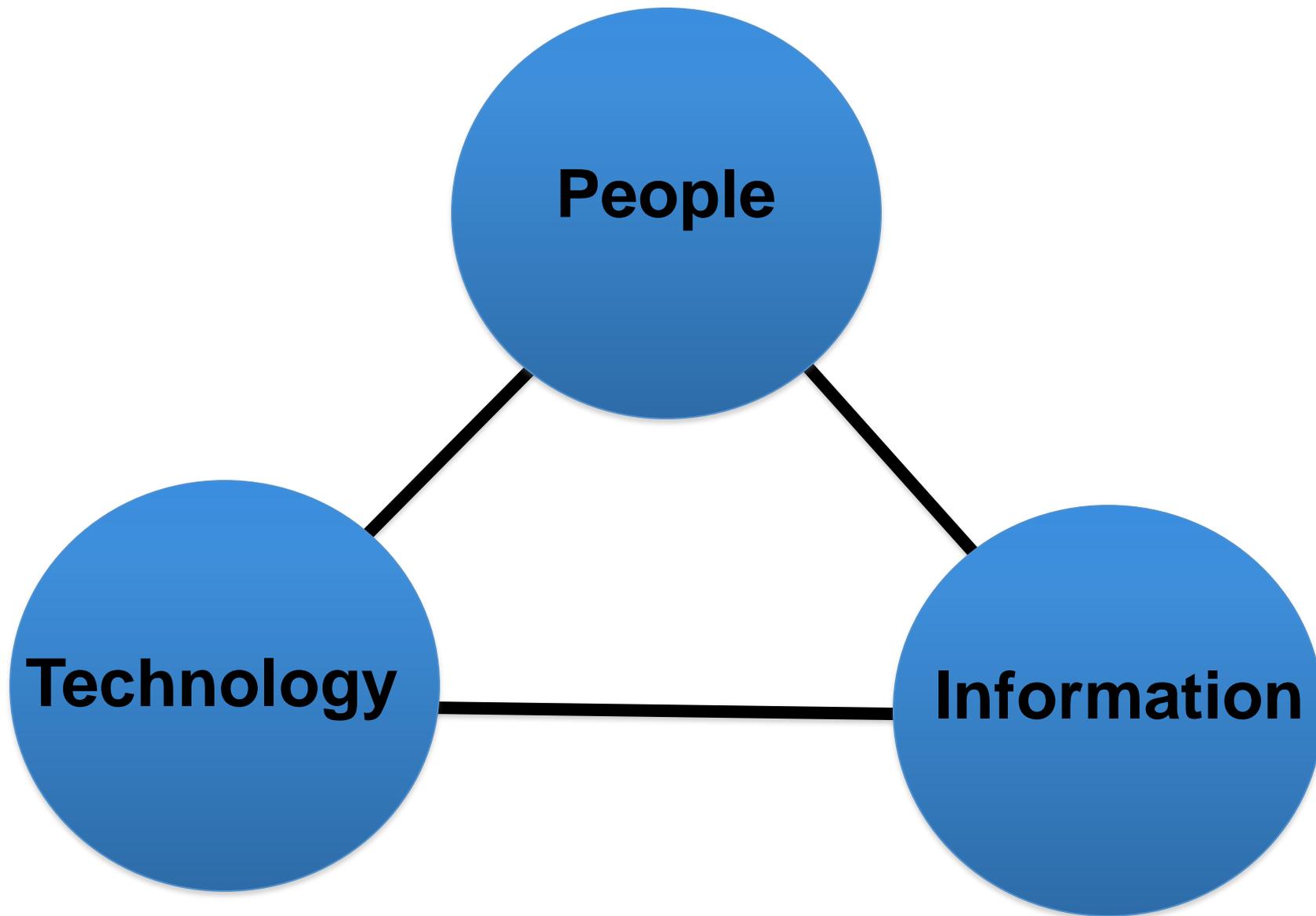






The Up The Pyramid Principle





“Why are we even discussing an intelligence capability in the first place?”



“Why are we even discussing an intelligence capability in the first place?”



“Why are we even discussing an intelligence capability in the first place?”



“Why are we even discussing an intelligence capability in the first place?”

- “Is Cyber Threat posing a greater threat than it was 10 years ago?”



“Why are we even discussing an intelligence capability in the first place?”

- “Is Cyber Threat posing a greater threat than it was 10 years ago?”

Contextual Change



“Why are we even discussing an intelligence capability in the first place?”

- “Is Cyber Threat posing a greater threat than it was 10 years ago?”
- **YES**



“Why are we even discussing an intelligence capability in the first place?”

- “Is Cyber Threat posing a greater threat than it was 10 years ago?”
- **YES**
- **BUT**



“Why are we even discussing an intelligence capability in the first place?”

- “Is Cyber Threat posing a greater threat than it was 10 years ago?”
- **YES**
- **BUT**
 - *Due to the contextual change of the importance of cyber space to Western Society*



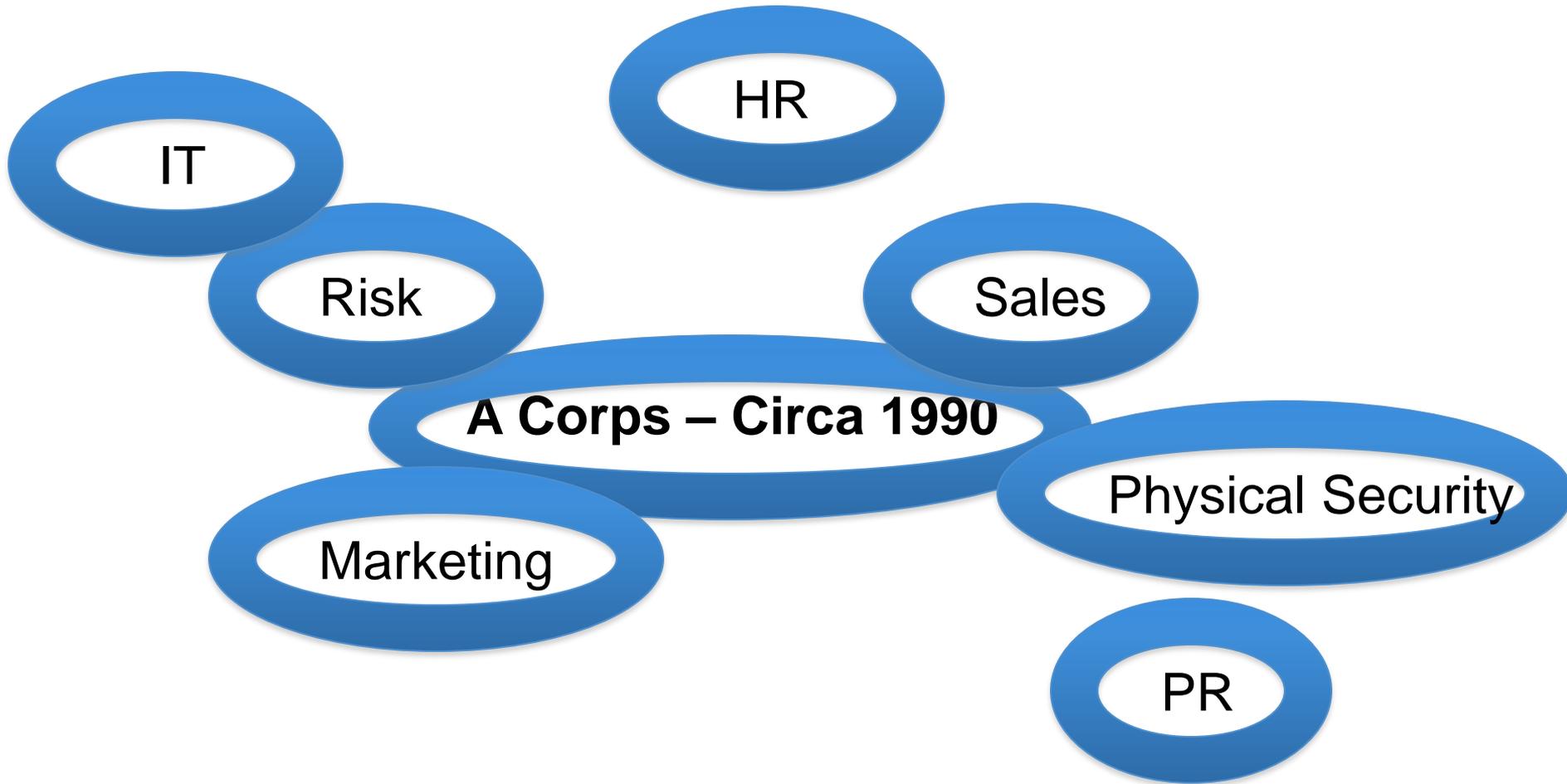
Effect on the intelligence team within the wider business context

Effect on the intelligence team within the wider business context

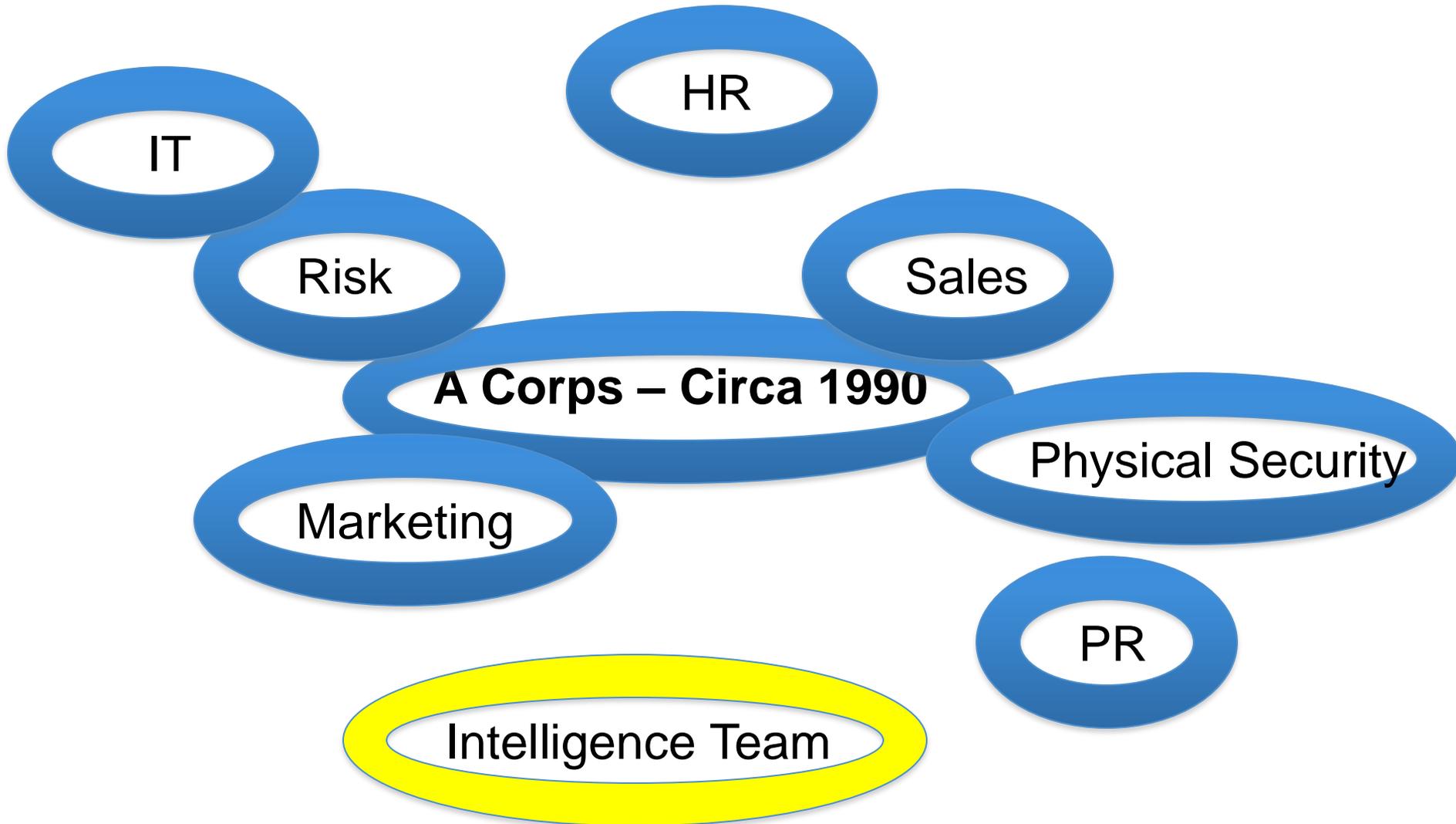


A Corps – Circa 1990

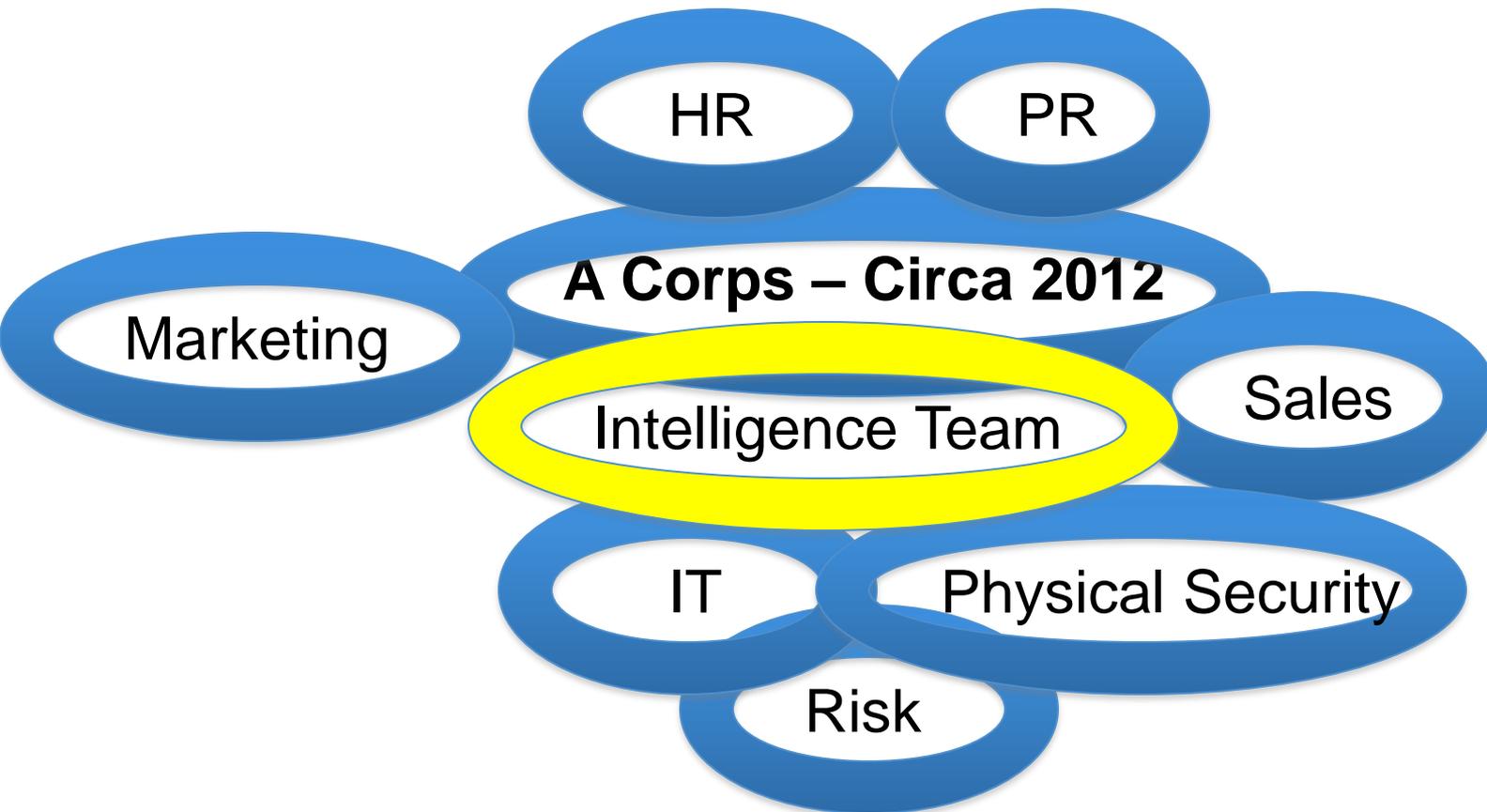
Effect on the intelligence team within the wider business context



Effect on the intelligence team within the wider business context



Effect on the intelligence team within the wider business context



Talk Contents

- Objective
 - Share some thoughts on what a good model for a cyber intelligence team should look like in the private sector
 - Lessons learnt over the past years
- Contents
 1. The socio-technical approach to intelligence team design
 2. The growth of the influence of the intelligence team within the wider business context
 3. Some points to consider – legal and reporting points



Talk Contents

- Objective
 - Share some thoughts on what a good model for a cyber intelligence team should look like in the private sector
 - Lessons learnt over the past years
- Contents
 1. The sociotechnical approach to intelligence team design
 2. The growth of the influence of the intelligence team within the wider business context
 3. Some points to consider – legal and reporting points





جهاد الصومال

@HSMPress_arabic

أخبار حركة الشباب المجاهدين في الصومال - هذه الصفحة غير رسمية

+ Follow

Text follow HSMPress_arabic to your carrier's shortcode

Tweets

Favorites

Following

Followers

Lists



HSMPress_arabic جهاد الصومال

المتحدث الرسمي: إذا لم توقفوا أبناؤكم سوف تقتضون أعواما تكون موتهم وتندمون بشدة حيث لا ينفع الندم.

12 hours ago



HSMPress_arabic جهاد الصومال

المتحدث الرسمي: 850 جندي لن يكون لهم تأثير وقد فشل آلاف من الكينيين، والأثيوبيين، والأوغنديين، واليوروبيين، والمرتزة الأمريكيين بشكل ذريع.

22 hours ago



HSMPress_arabic جهاد الصومال

المتحدث الرسمي: من معيب على جيبوتي أن تقف مع العدو وتشارك في غزو بلادنا ونحن من قاتلنا من أجل تحريرها

22 hours ago



HSMPress_arabic جهاد الصومال

المتحدث الرسمي الشيخ علي محمود راجي يتحدث إلى إذاعة الأندلس الإسلامية حول قرار جيبوتي إرسال جنود إلى الصومال

22 hours ago



HSMPress_arabic جهاد الصومال

#Welsh: على الغرب أن يعترف بحركة الشباب كالعامل الوحيد القادر على إقامة نظام حكم في **#الصومال** tinyurl.com/75nfr3x

14 Dec



HSMPress_arabic جهاد الصومال

تحديث: هجوم الليلة الماضية على تابو إستمر لساعة وكانت نتيجته مقتل 3 جنود كينيين. وتم إشعال مخزن الذخيرة كذلك.

13 Dec

Stay in touch with جهاد الصومال

Join Twitter right now:

Sign up

Curious how جهاد الصومال uses Twitter?

Discover who @HSMPress_arabic follows



About @HSMPress_arabic

46

Tweets

1

Following

40

Followers

0

Listed

[About](#) [Help](#) [Blog](#) [Status](#) [Jobs](#) [Terms](#) [Privacy](#) [Advertisers](#)
[Businesses](#) [Media](#) [Developers](#) [Resources](#) © 2011 Twitter

Email

Keep me logged in

Password

Log In

[Forgot your password?](#)

Muslim Defence League (MDL) - United We Stand, Divided We Fall is on Facebook.

To connect with Muslim Defence League (MDL) - United We Stand, Divided We Fall, sign up for Facebook today.

Sign Up

Log In



Muslim Defence League (MDL) - United We Stand, Divided We Fall

Like

15,829 likes · 1,508 talking about this

Political Organization

Fighting against racism, fascism and oppression. We welcome everyone from all faiths and backgrounds.
<http://muslimdefenceleague.wordpress.com/>



Photos

15,829

Likes



Events

Quran and Hadith prove Islam's Quran and Hadith Islam's Opposition

1 ▾

Notes 3

About

Highlights ▾

“A balance between security and privacy online must be struck...”

#INTELLIGENCE

Sir David Omand
Jamie Bartlett
Carl Miller



“A balance between security and privacy online must be struck...”

#INTELLIGENCE

Sir David Omand
Jamie Bartlett
Carl Miller

DEMOS

- **Social Media Intelligence “SOCMINT”**
- **“SOCMINT is not yet capable of making a decisive contribution to public security and safety.”**
- **“SOCMINT does not fit easily into the existing systems we have developed to ensure intelligence collected can be confidently acted on.”**

“A balance between security and privacy online must be struck...”

#INTELLIGENCE

Sir David Omand
Jamie Bartlett
Carl Miller

DEMOS

- **Social Media Intelligence “SOCMINT”**
- **“SOCMINT is not yet capable of making a decisive contribution to public security and safety.”**
- **“SOCMINT does not fit easily into the existing systems we have developed to ensure intelligence collected can be confidently acted on.”**

- **“SOCMINT does not fit easily into the existing systems we have developed to ensure intelligence collected can be confidently acted on.”**

- **“SOCMINT does not fit easily into the existing systems we have developed to ensure intelligence collected can be confidently acted on.”**



“A balance between
security and privacy
online must be
struck...”

#INTELLIGENCE

Sir David Omand
Jamie Bartlett
Carl Miller

DEMOS



Regulation of Investigatory Powers Act 2000

CHAPTER 23

Explanatory Notes have been prepared to assist in the
understanding of this Act and are available separately.

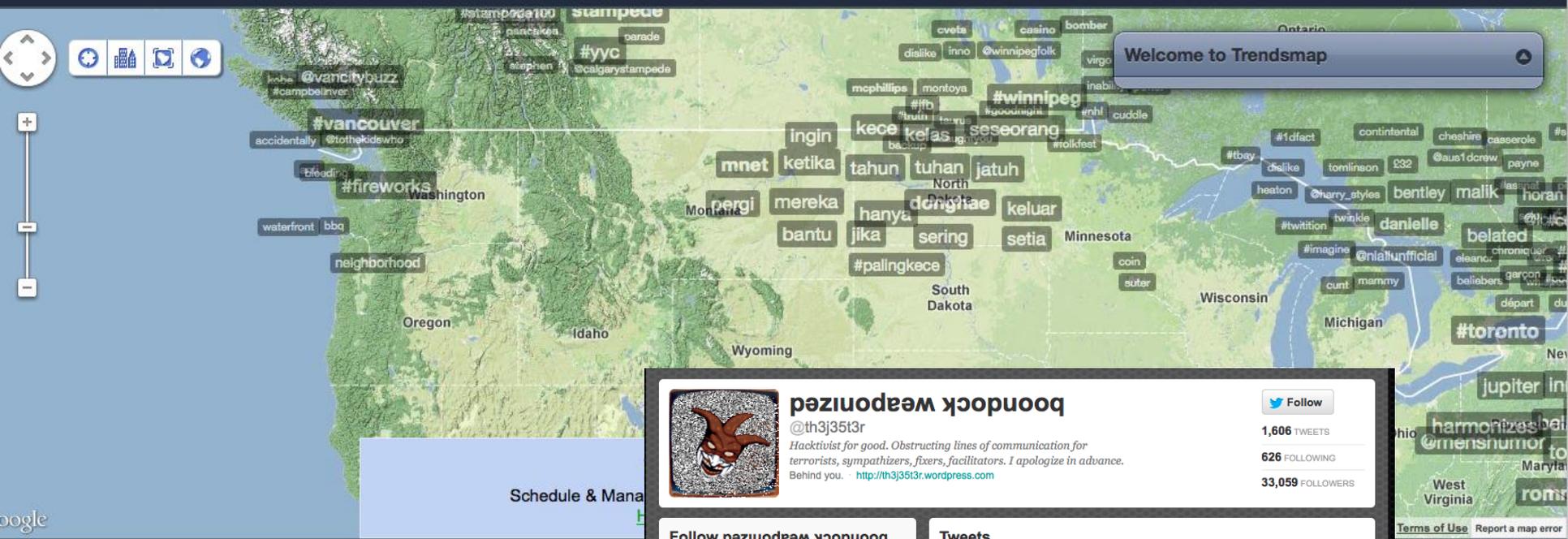
10211





twitter





boondock wəpɒnɪzɪd
 @th3j35t3r
 Hactivist for good. Obstructing lines of communication for terrorists, sympathizers, fixers, facilitators. I apologize in advance. Behind you. <http://th3j35t3r.wordpress.com>

Follow

1,606 TWEETS
 626 FOLLOWING
 33,059 FOLLOWERS

Follow boondock wəpɒnɪzɪd

Full name

Email

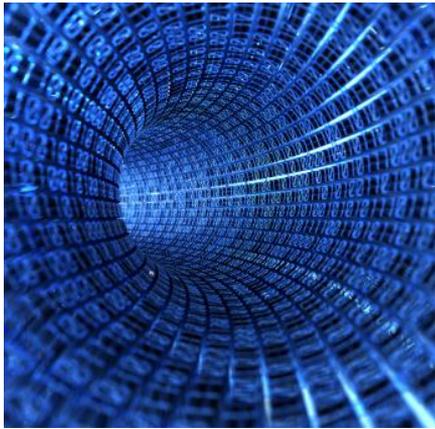
Password

Have an account? [Sign in.](#)

[Sign up](#)

- Tweets**
- Following
 - Followers
 - Favorites
 - Lists
 - Recent images

- Tweets**
- Kovacs Eduard** @EduardKovacs 4h
The Jester introduces Project Looking Glass, a tool designed for intelligence gathering on "bad guys" goo.gl/95Jw7 via @th3j35t3r
Retweeted by boondock wəpɒnɪzɪd
Expand
 - boondock wəpɒnɪzɪd** @th3j35t3r 11h
[#targetpractice](#)
Expand
 - @Anonymously37** @th3j35t3r 11h
@Anonymously37 - just because..... guess who got themselves on 'the list'? >>> th3j35t3r.wordpress.com/2012/07/04/pro... only advice to you now... [#stayfrosty](#)
[View media](#)
 - boondock wəpɒnɪzɪd** @th3j35t3r 11h
@th3rm4l @Anonymously37 It's ur typical #anonymous 'member' - it's why their whole model is flawed, they're overrun w/terrorists & traitors.
[View conversation](#)



Public Place?
Private Place?
Something Else?

Expectation of privacy?

1st Question

2nd Question

- “SOCMINT does not fit easily into the existing systems we have developed to ensure intelligence collected can be confidently acted on.”



Some Thoughts on SOCMINT

- SOCMINT is a combination of two intelligence disciplines
 - Signals Intelligence (SIGINT): the communication element of the medium
 - Human Intelligence (HUMINT): the message element of the medium
- The 5 x 5 x 5 intelligence grading system is ideal for SOCMINT reporting
- ***SO WHAT?: If done write then OSINT based intelligence can have a far greater penetration rate within an organization than other closed sources of intelligence***



5x5x5 according to the NIM

5x5 according to the NIM

Intel Evaluation

- 1 – Known to be true without reservation*
- 2 – Information known personally to the source but not to the reporting agent*
- 3 – Information is not known personally to the source but there is corroboration by information already recorded*
- 4 – Information that is not known to the source and cannot be corroborated*
- 5 – Information that is suspected to be false*



5x5x5 according to the NIM

Source Evaluation

A – Always reliable

B – Mostly reliable

C – Sometimes reliable

D – Unreliable

E – Previously untested



5x5x5 according to the NIM

Handling code

Code 1 – Permits dissemination to other law enforcement and prosecuting agencies (such as Benefits Agency) including agencies abroad where there are sufficient safeguards to protect the rights of individuals.

Code 2 – Permits dissemination to non prosecuting agencies (such as credit card companies)

Code 3 – Permits dissemination to foreign agencies where no, or inadequate safeguards to protect the rights of others exist; however, this is only on the grounds of substantial public interest.

Code 4 – Permits dissemination only within originating agency/force with internal recipients.

Code 5 – Permits dissemination to other agencies but only in accord with specified conditions such as 'no further dissemination' or 'to be discussed with originator and documented'.



5x5x5 according to the NIM

Handling code

Code 1 – Permits dissemination to other law enforcement and prosecuting agencies (such as Benefits Agency) including agencies abroad where there are sufficient safeguards to protect the rights of individuals.

Code 2 – Permits dissemination to non prosecuting agencies (such as credit card companies)

Code 3 – Permits dissemination to foreign agencies where no, or inadequate safeguards to protect the rights of others exist; however, this is only on the grounds of substantial public interest.

Code 4 – Permits dissemination only within originating agency/force with internal recipients.

Code 5 – Permits dissemination to other agencies but only in accord with specified conditions such as 'no further dissemination' or 'to be discussed with originator and documented'.



5x5 example

 **HSM Press Office** @HSMPress 20 Sep
The frustrated Kuffar responded by shelling residential areas (Bondhere & Shibis) killing and injuring innocent Muslims.
Expand

	1/ A	2/ B	3/ C	4/ D	5/ E
Intel Evaluation					
Source Evaluation					

Grade: Not know to the source but externally corroborated, Unreliable



Some concluding thoughts on Open Source Intelligence

- OSINT Is not for the “new guy”
- Established models of best practice in other intelligence disciplines



Final concluding point on developing a cyber intelligence capability



Final concluding point on developing a cyber intelligence capability

- **“If today is the information age then tomorrow will be the intelligence age”**





Questions?