

RSA® Conference 2019

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BETTER.

SESSION ID: IDY-W12

How the H@ck R U? A Modern Identity Assurance Approach in a Hacked World

Angel Grant, CISSP

Director, Identity, Fraud & Risk Intelligence
RSA
@AngelsGrant

#RSAC



GRAY WEB

Hiding in Plain Sight

Criminal
Nation State
Hacktivist

DEEP WEB

Closed Network

DARK NET

Anonymous Network

Think Like a Cybercriminal

Services Offering



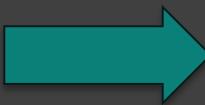
Cybercriminal Opportunity

Next-day shipping / In-store pickup



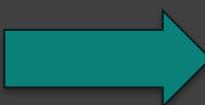
My shipping mule will have it before your fraud team knows its gone!

Real-time payments



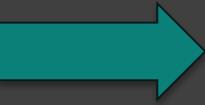
I'll cash out before your customer calls about a weird transaction

\$10 for new accounts promotion



One sounds good but 6,000 sounds great

"Forgot my password" link



Hmm...we have credential stuffing tools

Account locks after 5 failed logins



Good luck making \$ when I lock your users

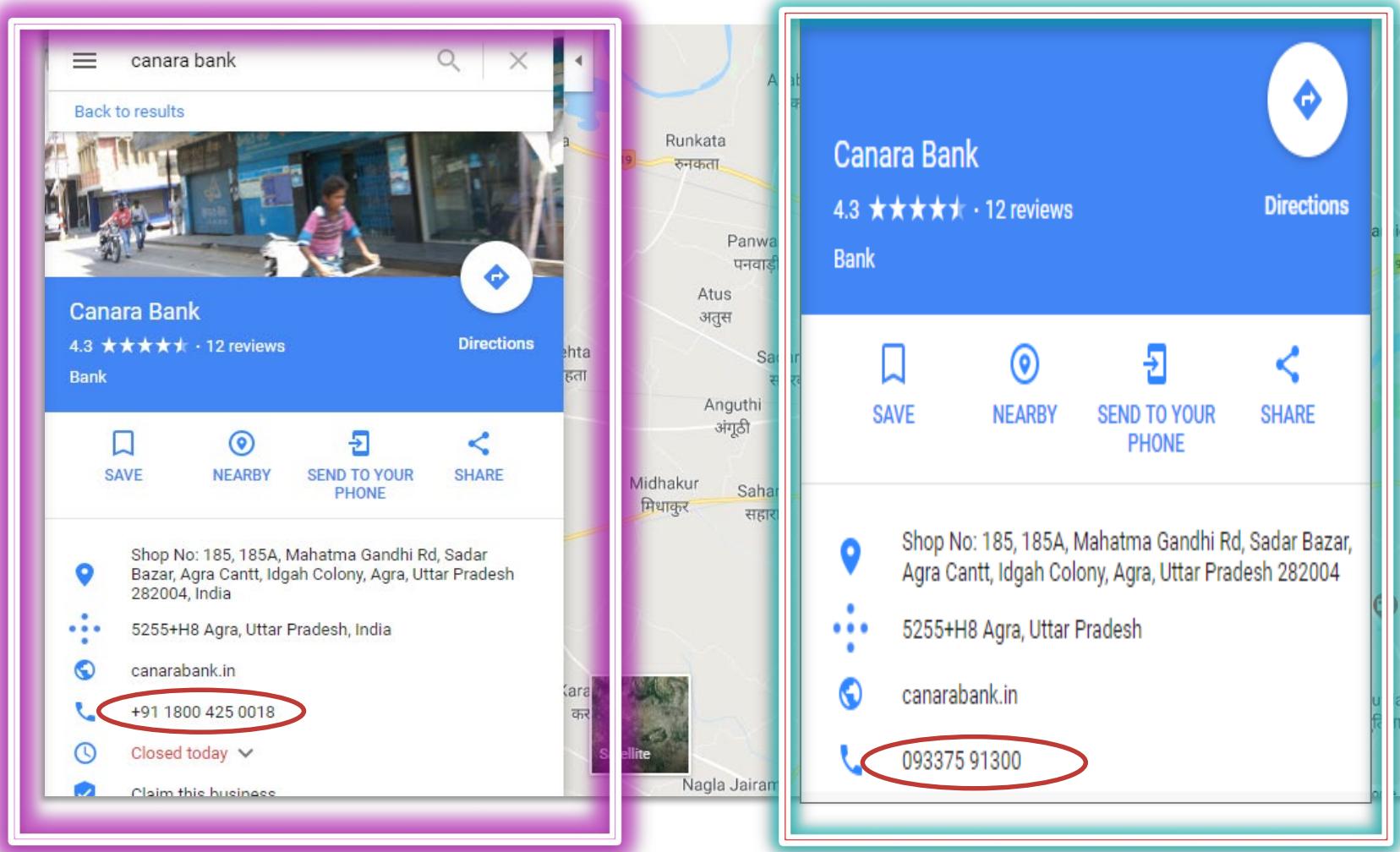
Aggregated online accounts



Cool, identity theft one-stop-shop!

Here is How a Cybercriminal Thinks - Vishing in Reverse

- Customer searches for phone number
- Google Maps present details
- Customer calls fraudster



Why Cybercriminals Target Specific Industries



Customizable Shopping - CVV Store

		CC		NEWS	BUY	ORDERS	BILLING	CHECKERS	BINBASE	SUPPORT	BALANCE CART	100.83 \$ 0		
														
RESET				ADD TO CART				SEARCH						
	Bin	Exp	First name	Last name	Address	City	State	Zip	Phone	Country	Fullz	Can I refund?	Price	Base Name
<input type="checkbox"/>	4658: CLASSI DEBIT	12/19	Emma	All	x	SWA	PLEASE SELECT REGION STATE OR PROVINCE	Sa1	0747	UNITED KINGDOM	-	No	12.00\$	DEC_#20_UK_US_NO_REF
<input type="checkbox"/>	4658: CLASSI DEBIT	07/20	Alannah	Pa	x	TAM	PLEASE SELECT REGION STATE OR PROVINCE	B77	0737	UNITED KINGDOM	-	No	12.00\$	DEC_#20_UK_US_NO_REF
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<input type="checkbox"/>	4658:	09/20	Joe	Po	30x	BIRM	WEST MIDLANDS	B44	0785	UNITED KINGDOM	-	No	12.00\$	DEC_#20_UK_US_NO_REF

Shopping for Credentials on Account Stores

Thursday 25 January 2018

News Crime

Most Read **Most Shared**

'No way' jailed brother will be released for funeral of latest Hutch-Kinahan feud... [Crime](#)

Romance fraud: Irish woman lost €37,000 after falling in love with a man claiming to be a US soldier serving in Afghanistan



1 Q

Use search box, to search for sellers, information etc.

Type	Country	Seller	Any	Match	ChristianMingle	POF	Jdate	Eharmony	Zoosk
Any	Any	Any	FirstMet	Chemistry	MuslimMatch	SingleParentMeet	Mingle2		
<input type="text"/> CHEAPEST <input type="button" value="Search"/>									
Information									
Friends Count: 0 // Credit Balance: 0 // NAME : [REDACTED] : Ward // Gender: m // Province : NY									
PAID Pof - Gender: Male, Age: 21, Profile: www.pof.com/viewprofile.aspx?profile_id=[REDACTED], Subscription Status: 3 Month Upgrade, Expire: 2017-06-18									
Unpaid Account - Wheeling, IL / Age: 75 / DOB: January/ [REDACTED]/1942 / Male									
UNPAID Match - Country: United-States, Age: 21, Gender: Male, Zip Code: 90706									
UNPAID Match - Gender: Female, Age: 26, Country: United-States, Zip: 56556, DOB: [REDACTED].08.1990									
UNPAID - Birthday: 1962-11-2 [REDACTED]T00:00:00.000Z, Gender: MALE, Country: US									
Free Account / Female / Zip Code: 12912 / September-4-1992 / Age: 25 / United States / a [REDACTED] / New York									

News Crime

FOLLOW CONTACT

Romance fraud: Irish woman lost €37,000 after falling in love with a man claiming to be a US soldier serving in Afghanistan



Victims fall in love with what they believe are their perfect partners online – until they discover they have been scammed into handing over a substantial amount of money to help solve a financial problem – in what is known as a 'catfish' scam. Stock picture

Tom Brady  January 23 2018 11:51 PM



ROMANCE fraud is blooming on the internet and is becoming a worrying problem for members of the Garda National Economic Crime Bureau, who say it is on the increase here.

Victims fall in love with what they believe are their perfect partners online – until they

- 'No way' jailed brother will be released for funeral of latest Hutch-Kinahan feud... [Crime](#)
- Romance fraud: Irish woman lost €37,000 after falling in love with a man claiming to be a US soldier serving in Afghanistan
- Brother of feud murder victim Derek Coakley Hutch heard him being shot dead via a... [Crime](#)
- Gardai arrest man in connection with serious assault that left 35-year old in critical... [Crime](#)
- Pictured: Third nephew of Gerry 'The Monk' Hutch killed in gangland shooting [Crime](#)

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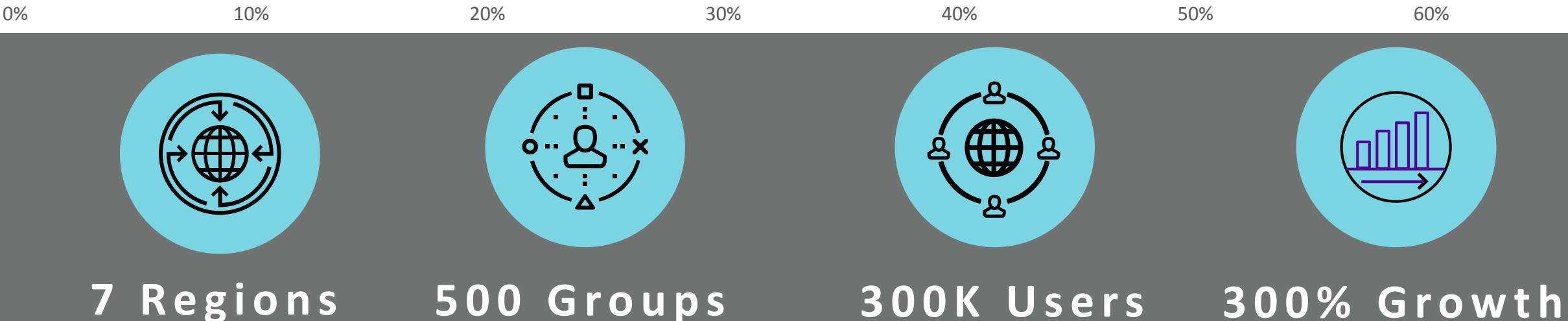
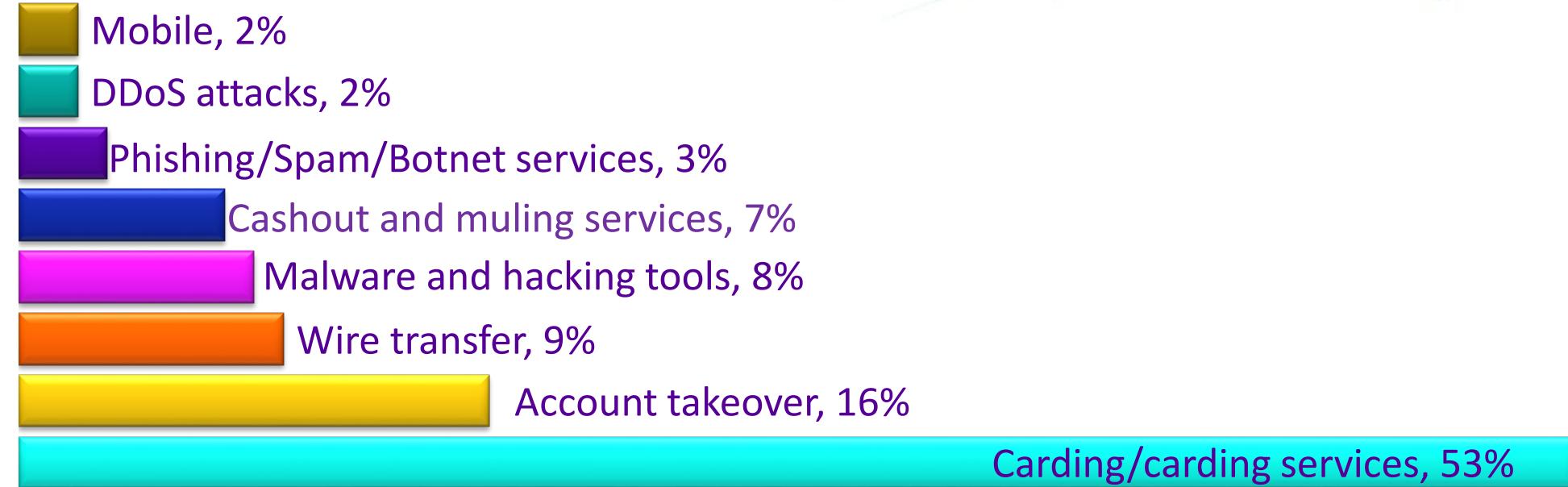
by Outbrain

-  How a Canadian City Ended Homelessness With a Simple Idea [Goodnet](#)
-  Sir Cliff Richard Knocks €3 Million Off Portuguese Vineyard Estate [Mansion Global](#)

One Stop Simplified Cybercrime Shops

Name:	Category: Dedicated servers (RDP) USA	♥ 240	🛒 13973	★ 100	🕒 98	✉ 11	Sort by ▾
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Title	Country	State	Info	Blacklist	Upload		
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Dedicated server (RDP) USA and other countries	India	Delhi	Administrator, Windows 2012, RAM 64.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$10.00
Dedicated server (RDP) USA and other countries	South Africa	Gauteng	User, Windows 2008, RAM 16.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	Japan	Tokyo	User, Windows 2012, RAM 64.00 GB, Yes Blacklist	YES	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	Morocco	Grand Casablanca	User, Windows 2007, RAM 24.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	Germany	Niedersachsen	User, Windows 2016, RAM 4.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	Malta	N/A	User, Windows 2012, RAM 8.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	South Africa	Western Cape	User, Windows 2007, RAM 3.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	Kenya	Nairobi Area	Administrator, Windows 2012, RAM 64.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$10.00
Dedicated server (RDP) USA and other countries	France	N/A	User, Windows 2016, RAM 16.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	Netherlands	Utrecht	User, Windows 10, RAM 4.00 GB, NO Blacklist	NO	8/10/2018 10:30	+ 🛒	\$8.00
Dedicated server (RDP) USA and other countries	Czech Republic	Hlavni mesto Praha	User, Windows 2012, RAM 32.00 GB, NO Blacklist	NO	7/10/2018 19:37	+ 🛒	\$8.00

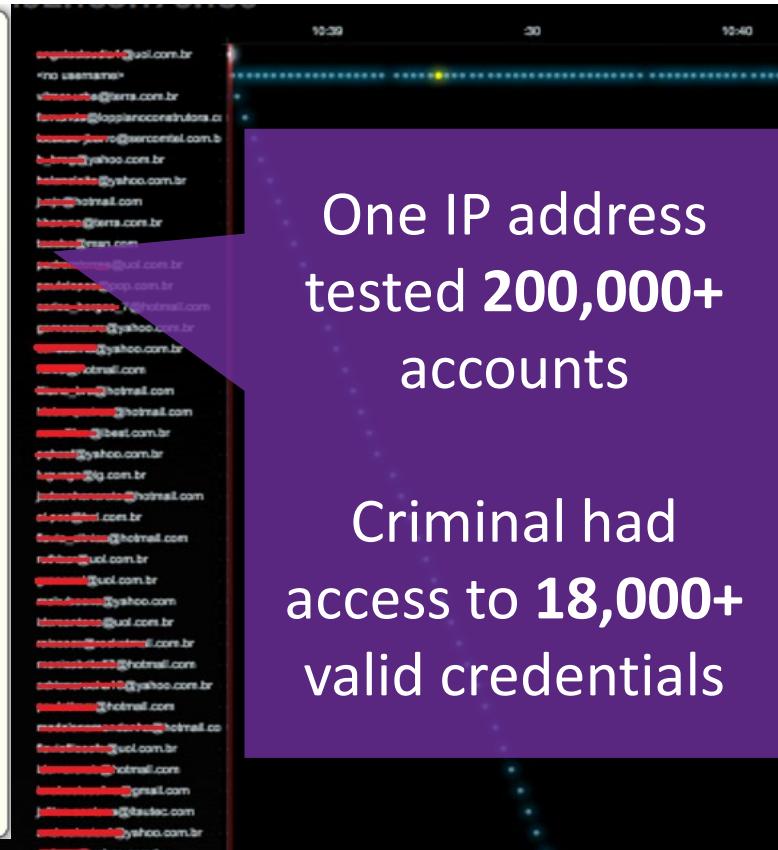
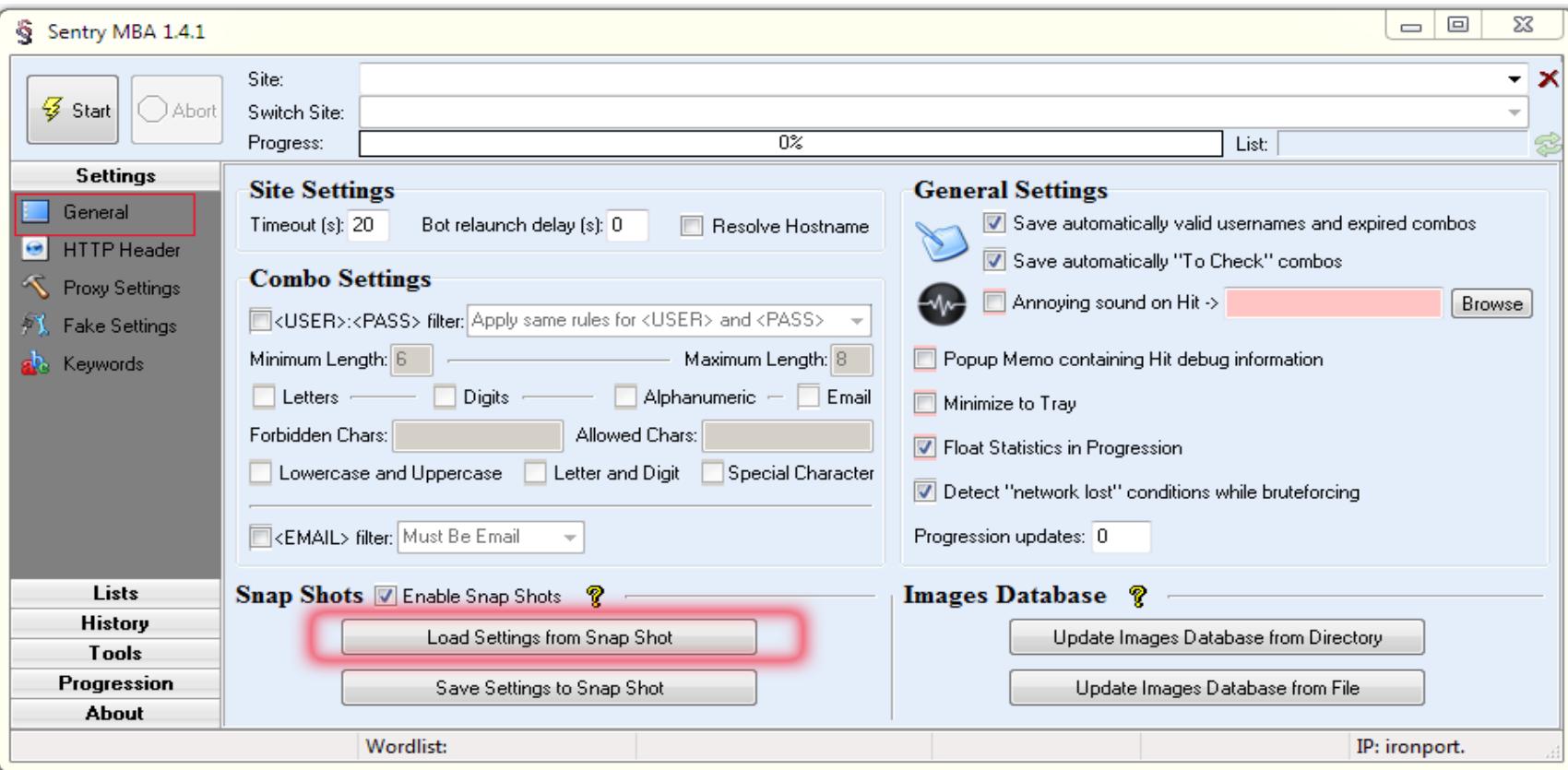
Dark Web Morphing into “Gray Web”



Surplus Inventory Selling in Plain Sight



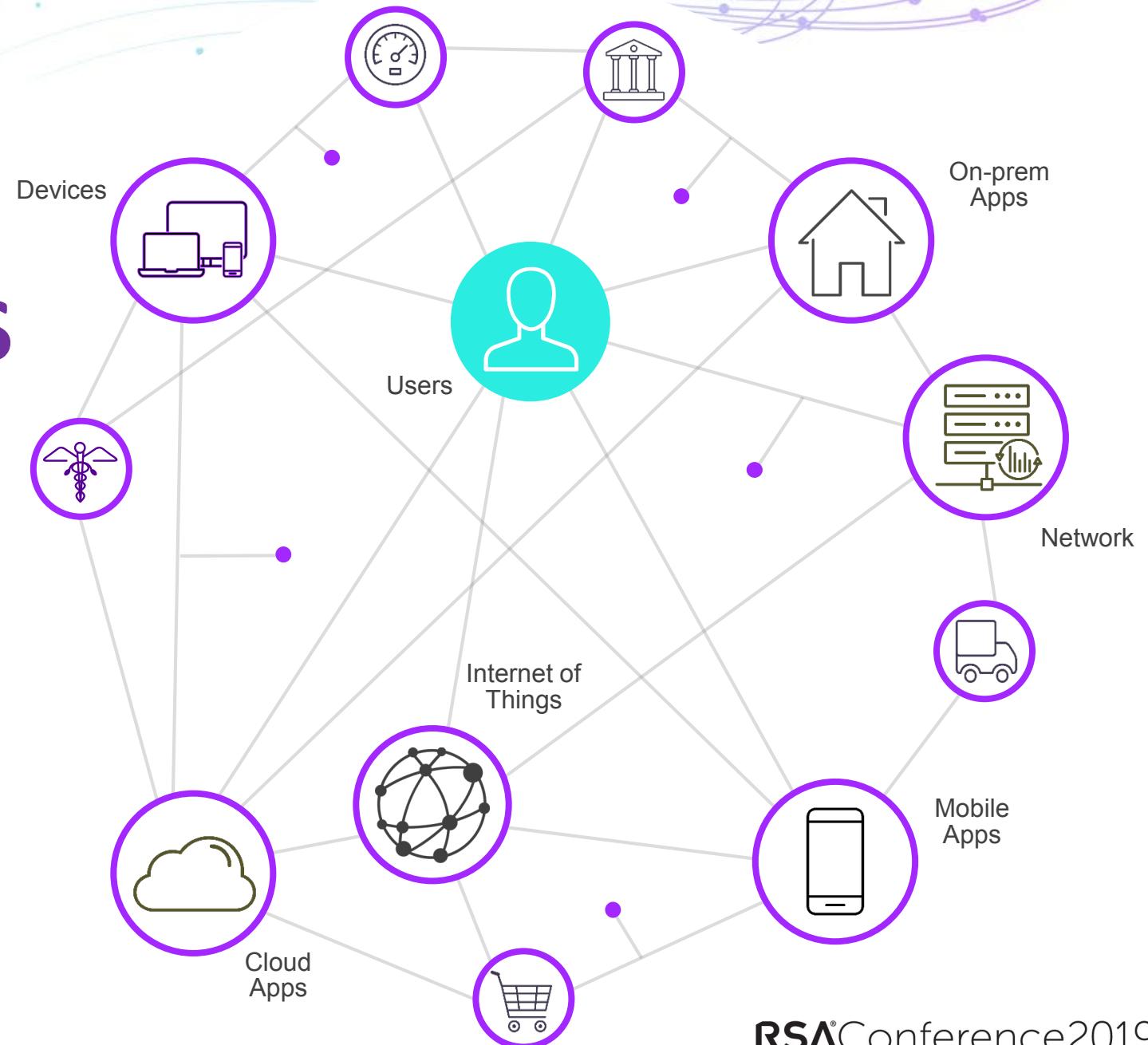
Why Steal It When You Can Stuff It



- New Account has 15x higher fraud rates in 1st 10 days
- Fraud rates 3x higher from new device

IDENTITY OF CONNECTED THINGS

Opens Business Opportunities And Vulnerabilities



IDENTITY ASSURANCE



ACCESS ASSURANCE



ACTIVITY ASSURANCE

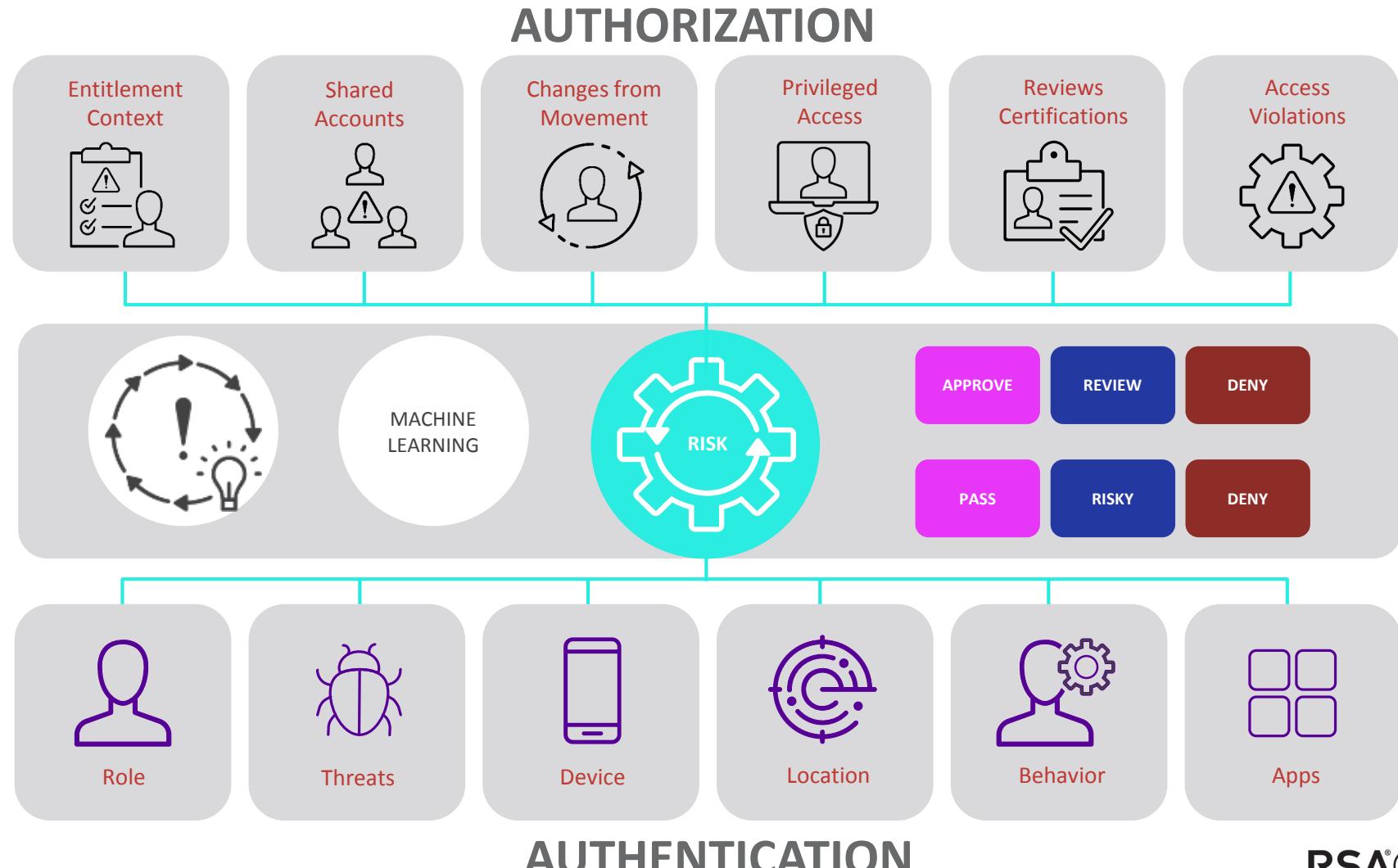


is the user or entity who
they claim they are?

what level of access to
applications and data is ok?

is what they are doing
appropriate or not?

TRANSLATE VISIBILITY INTO INSIGHTS BY CORRELATING ACCESS DATA



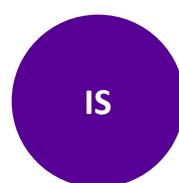
IDENTITY & ACCESS MANAGEMENT



is the user?



can they access?



what they are doing ok?

NETWORK & PERIMETER SECURITY



do you take threats into account?



FRAUD INTELLIGENCE



known fraud is this user or device associated with?

GOVERNANCE, RISK & COMPLIANCE



should I care?
Is there a risk to my business?

Use Case #1: Identity Assurance

Trust a simple 4 digit PIN for VPN access?

Apply Identity Analytics
How about now?

Th1\$2\$4ck\$!

! We weren't able to update your password.
Please make sure your new password follows the guidelines on this page.

Username

Enter a new password

Confirm your new password

Here are the guidelines for creating a new password:
• At least 8 characters long
• It must contain at least 2 of the following criteria:
- At least 1 uppercase letter
- At least 1 lowercase letter
- At least 1 number
- At least 1 special character (! # \$ % + /)
• It must be different than your previous 5 passwords.
• It can't use the name of the financial institution (for example: [Bank Name]).
• It can't be a commonly used password (for example: password1).

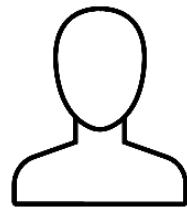
Role Threats Device

Location Behavior Apps

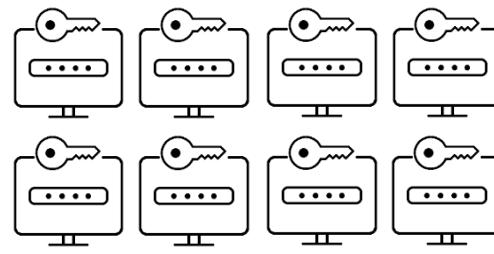
1234

Use Case #2: Access Assurance

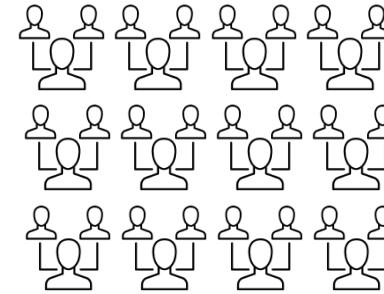
USERS



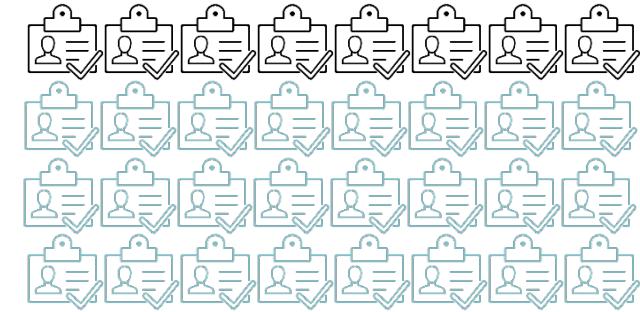
ACCOUNTS



ROLES



ENTITLEMENTS

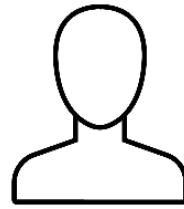


DECISION

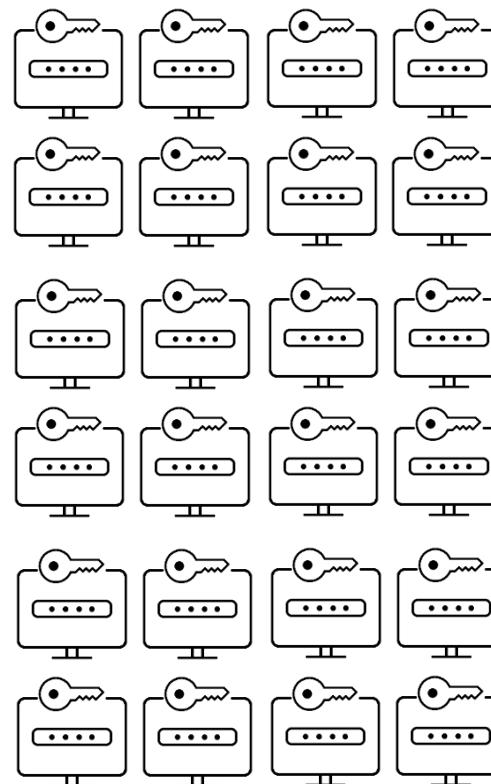
APPROVED

Use Case #2: Access Assurance

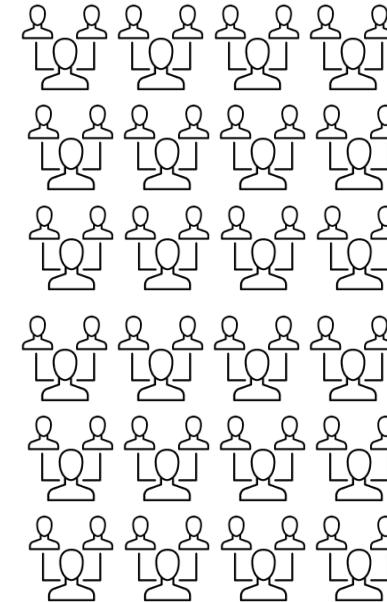
USERS



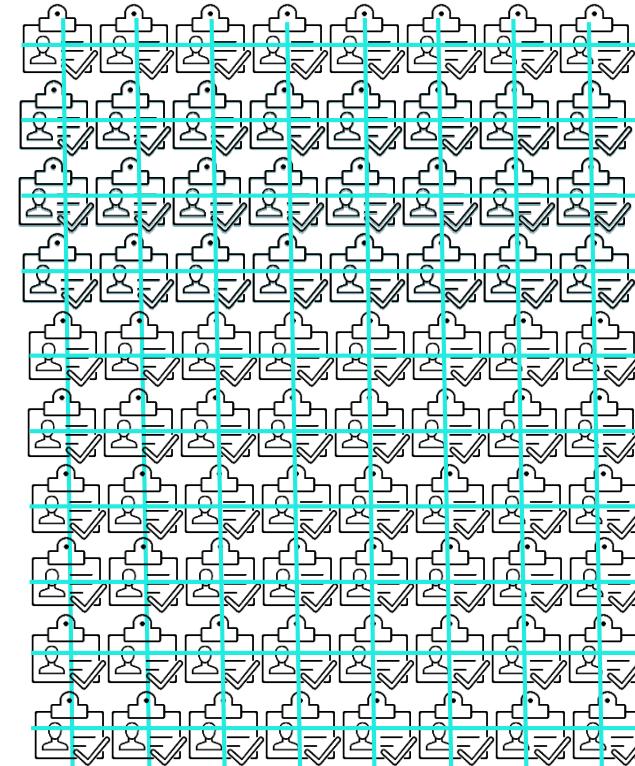
ACCOUNTS



ROLES



ENTITLEMENTS

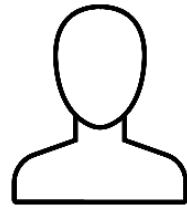


DECISION

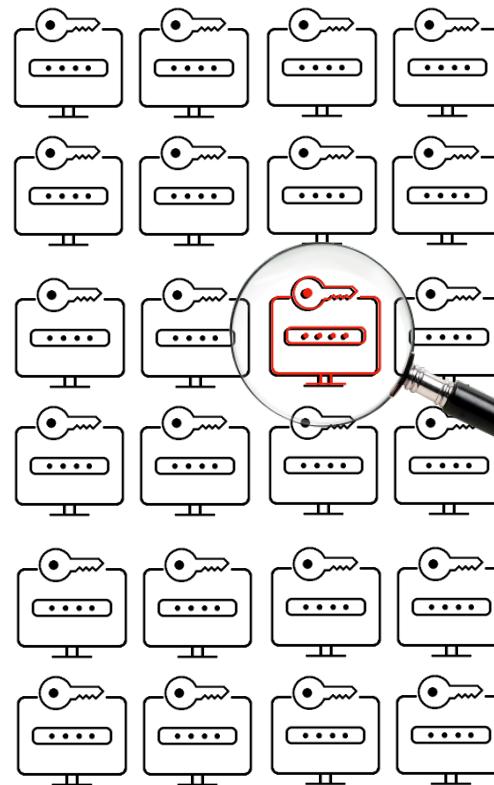


Use Case #2: Access Assurance

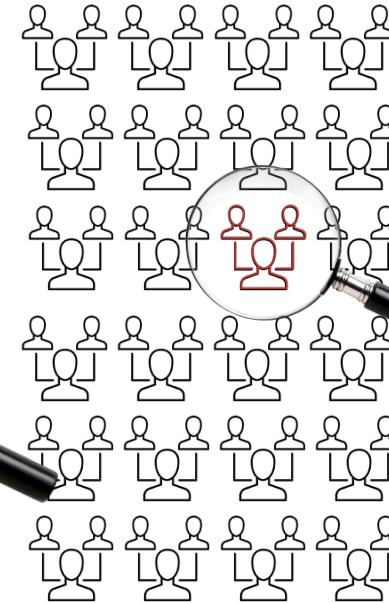
USERS



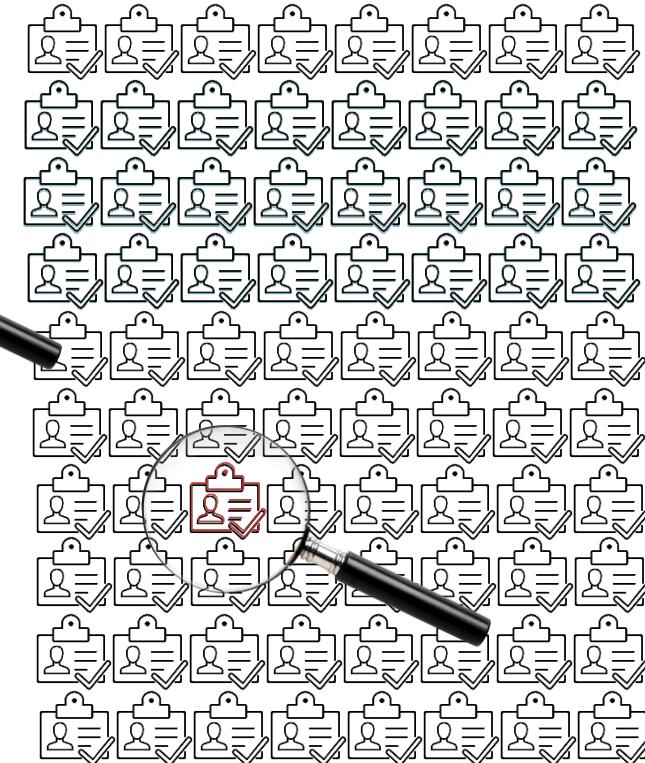
ACCOUNTS



ROLES



ENTITLEMENTS

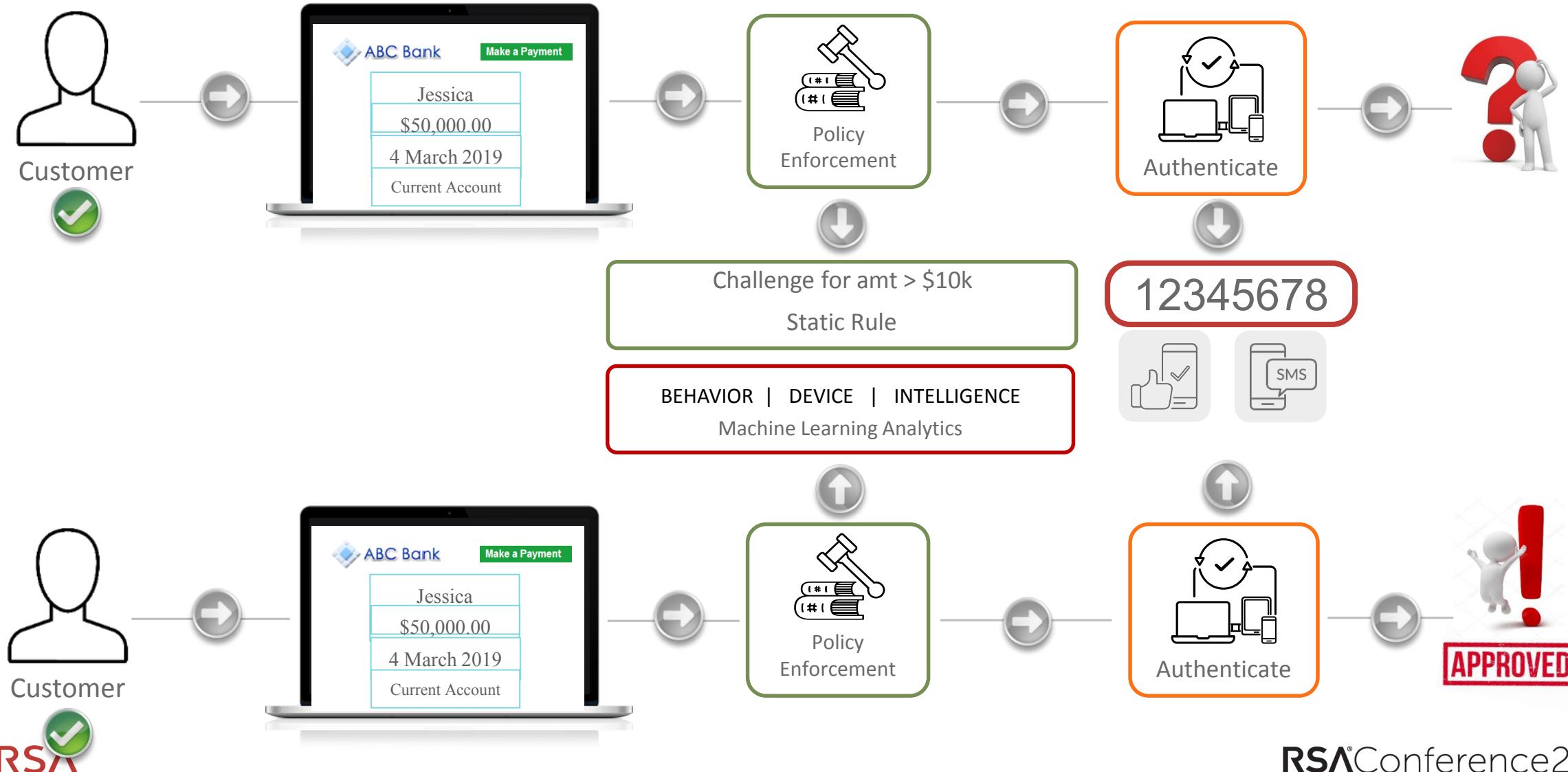


DECISION

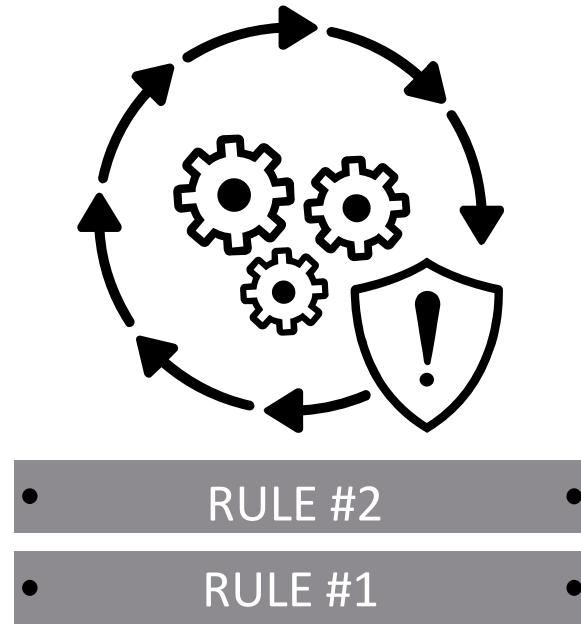


APPROVED

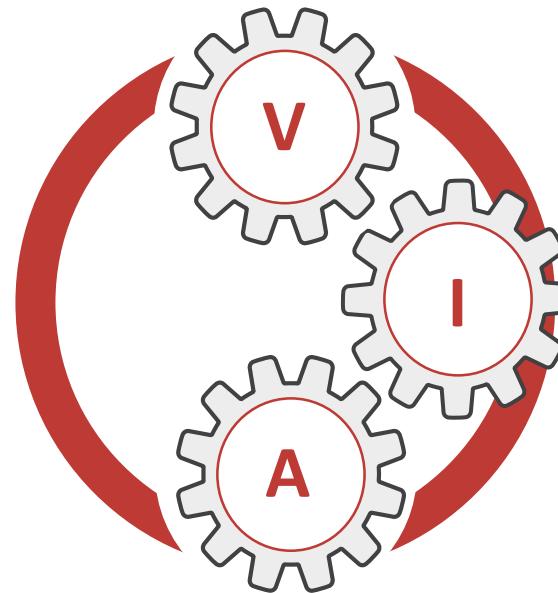
Use Case #3: Activity Assurance



What Should You Do to Transform Your Identity Assurance Strategy?



Augment static-rules
with analytics



Expand visibility & insight to
take Action



Harness the power
across your security village

How the H@CK R U Now?

Apply What You Have Learned Today

- **Next week you should:**

- Identify who is monitoring cybercrime underground for your company

- **In first three months you should:**

- Investigate new potential points of vulnerability
 - (e.g. Shadow IoT, islands of identities, credentials sold on social media)
 - Create plan to mitigate account takeover
 - Augment static-based IAM rules with identity analytics

- **Within six months you should:**

- Unite your security village
 - including threat detection, GRC and fraud prevention tools

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Angel Grant, CISSP
RSA, Director
@Angelsgrant