Cloud Security

Finding your "infinity stones"

Monica Verma | Host We Talk Cyber Podcast

@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma
MonicaTalksCyber.com

Monica Verma

MonicaTalksCyber
Host of We Talk Cyber Podcast Show
Board Member, Cloud Security Alliance NO

@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma
MonicaTalksCyber.com

1950
Konsept

1997
Cloud Computing

1999
Salesforce

2006
Amazon EC2

…

2019

public
hybrid

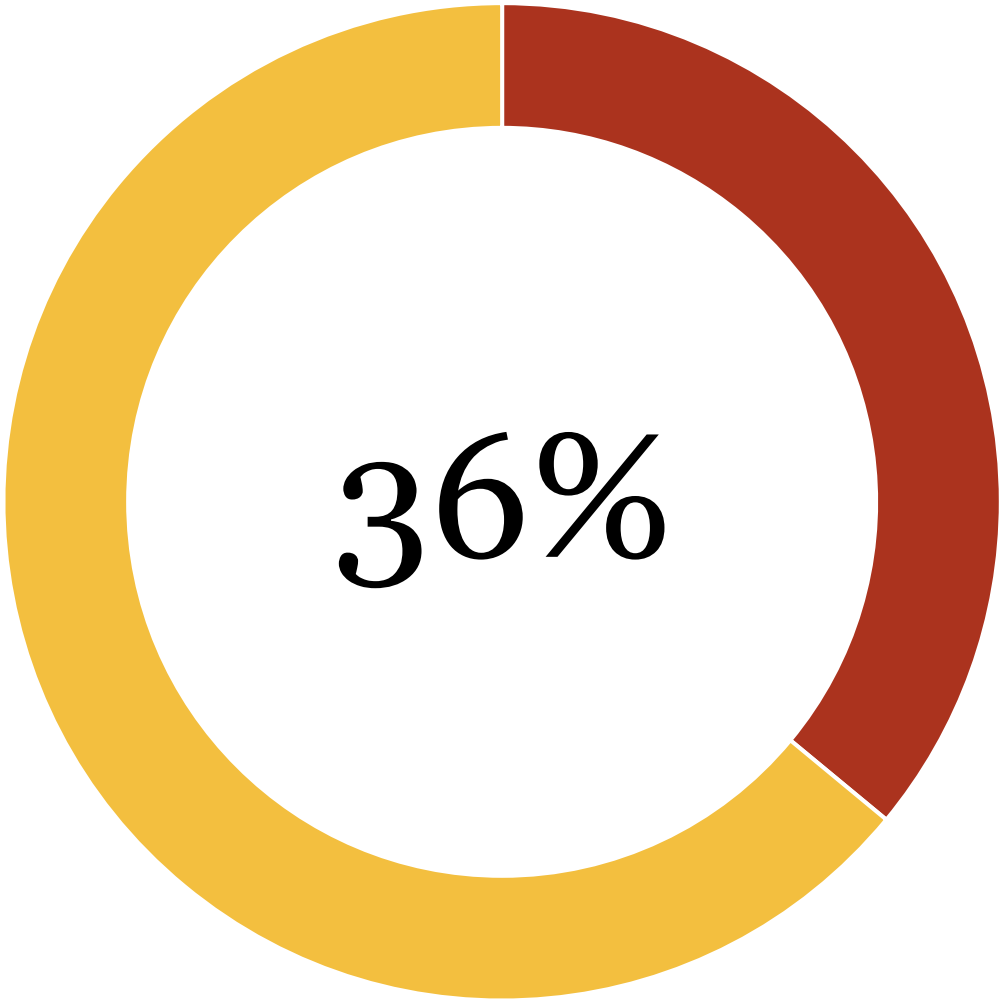
@MonTalksCyber MonicaVerma MonicaTalksCyber

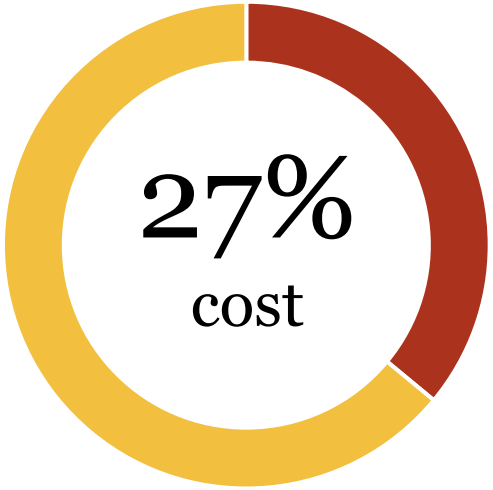
Monica Verma
MonicaTalksCyber.com

Why do companies move to cloud

?

More than 1/3 migrate for security





Source: CyberArk Survey

@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma
MonicaTalksCyber.com

TechRepublic. SEARCH

Cloud Big Data AI IoT Cybersecurity More Newsletters Forums Resource Libra

Why your data in the cloud isn't as secure as you think

COMPUTERWORLD UNITED STATES WINDOWS MOBILE OFFICE SOFTWARE APPLE SHARK TANK E

Home > Cloud Security

NEWS ANALYSIS

No, your data isn't secure in the cloud

In 2012, Google alone received 21,389 government requests for infor
33,634 user accounts

By Lucas Mearian

Senior Reporter, Computerworld | 13 AUGUST 2013 07:00 PT

While online data storage services claim your data is encrypted, there are no guarantees. With recent revelations that the federal government taps into the files of Internet search engines, email and cloud service providers, any myth about data "privacy" on the Internet has been busted.

COMPUTERWORLD CIO PREMIUM JOB & KARRIERE EKSPERTEN

CIO DIGITALISERING LEDELSE TOP 100 FORRETNINGSSOFTWARE NAVNENYT

Kæmpe-analyse: Derfor er skyen totalt sikker

Cloud-tjenester er et sikkert opbevaringssted for dine data. Selv om vi leder, kan vi ikke finde nogen angreb mod skyen, lyder konklusionen i en omfattende undersøgelse af datasikkerhed.

23. april 2013 kl. 14.21

@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma

MonicaTalksCyber.com

MARVEL

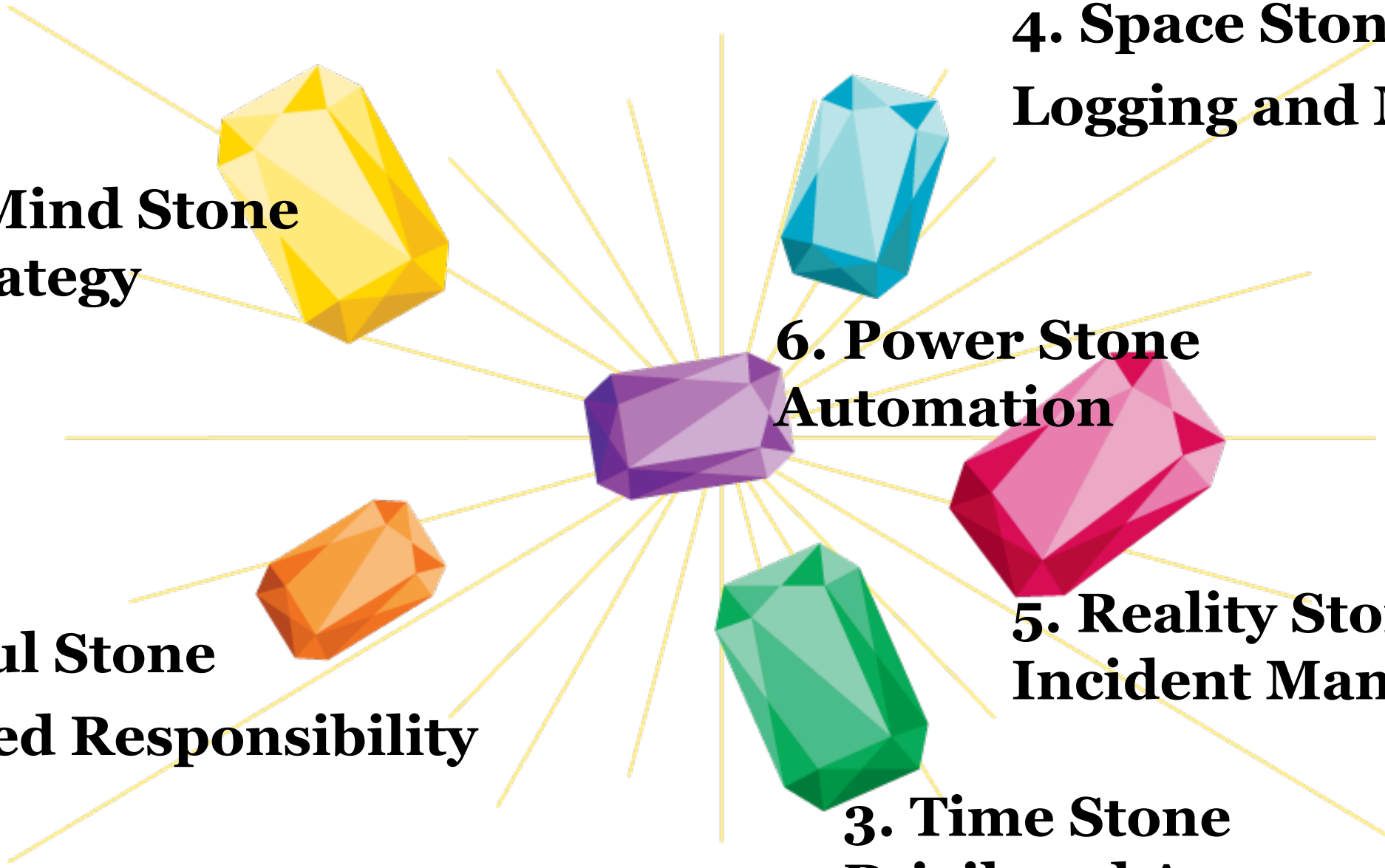
FIND. YOUR. STONES.

MANAGE. THEM.

@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma

MonicaTalksCyber.com



@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma
MonicaTalksCyber.com

1

Soul Stone
Shared Responsibility

Single
Responsibility

→

Shared
Responsibility

Security in the cloud
(Cloud Consumer)

vs.

Security of the cloud
(Cloud Service Provider)

“Å spille hverandre gode”

Nils Arne Eggen

«Å spille hverandre gode»

– Nils Arne Eggen

Cloud Supply Chain

e.g. MS Azure AD
IBM Cloud Identity

e.g. Azure IaaS
Amazon Web Services (AWS)

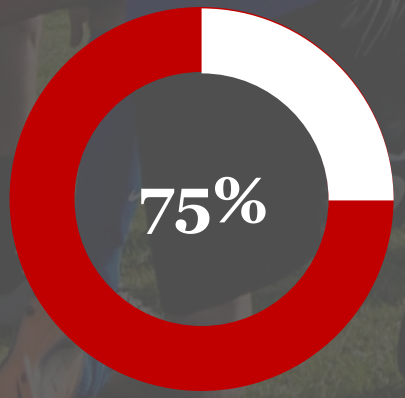
e.g. Secureworks
IBM MSS

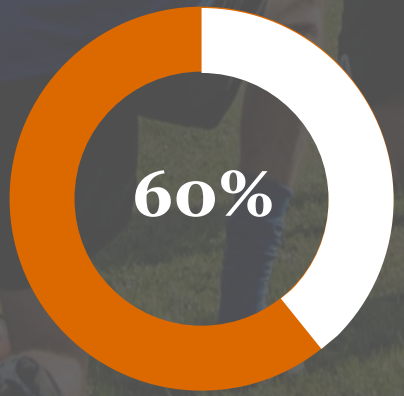
Monica AS

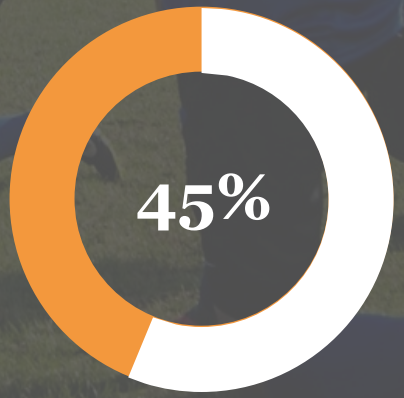
Security and Trust

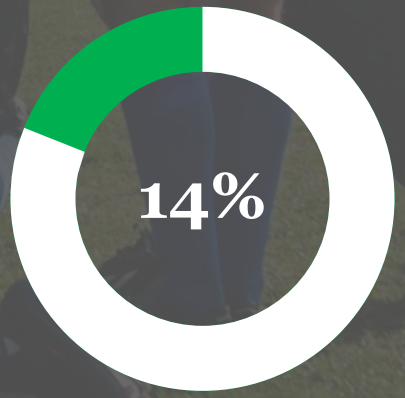
Shared Responsibility

within the entire cloud supply chain









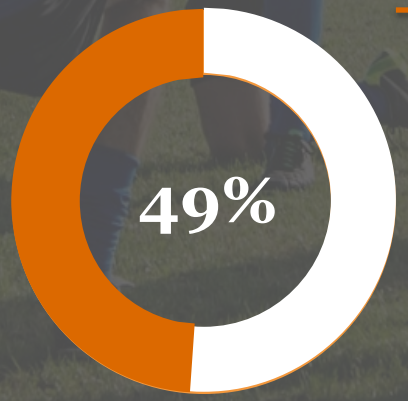
@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma

MonicaTalksCyber.com

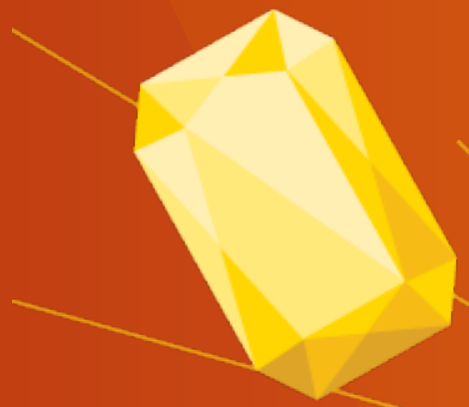
Security and Trust

Overall Risk



@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma
MonicaTalksCyber.com



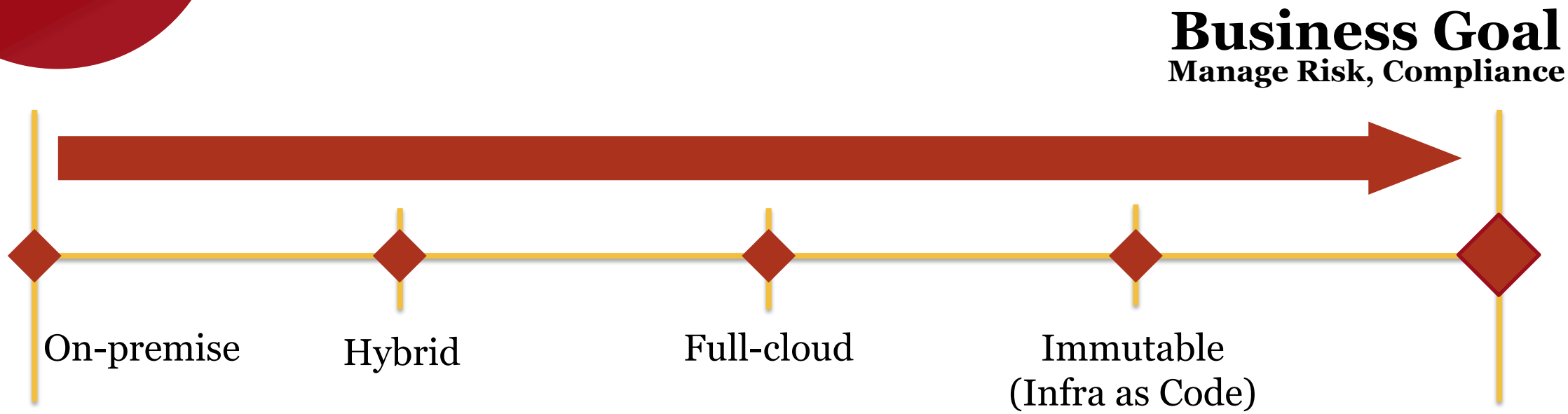
2

Mind Stone
Strategy

“Sound strategy starts with having the right goal.”

Michael Porter

Strategic Alignment



3

Time Stone
Privileged Access

Privileged Access

#1

The biggest concern in public cloud

46%

Privileged Access of insiders, partners & contractors

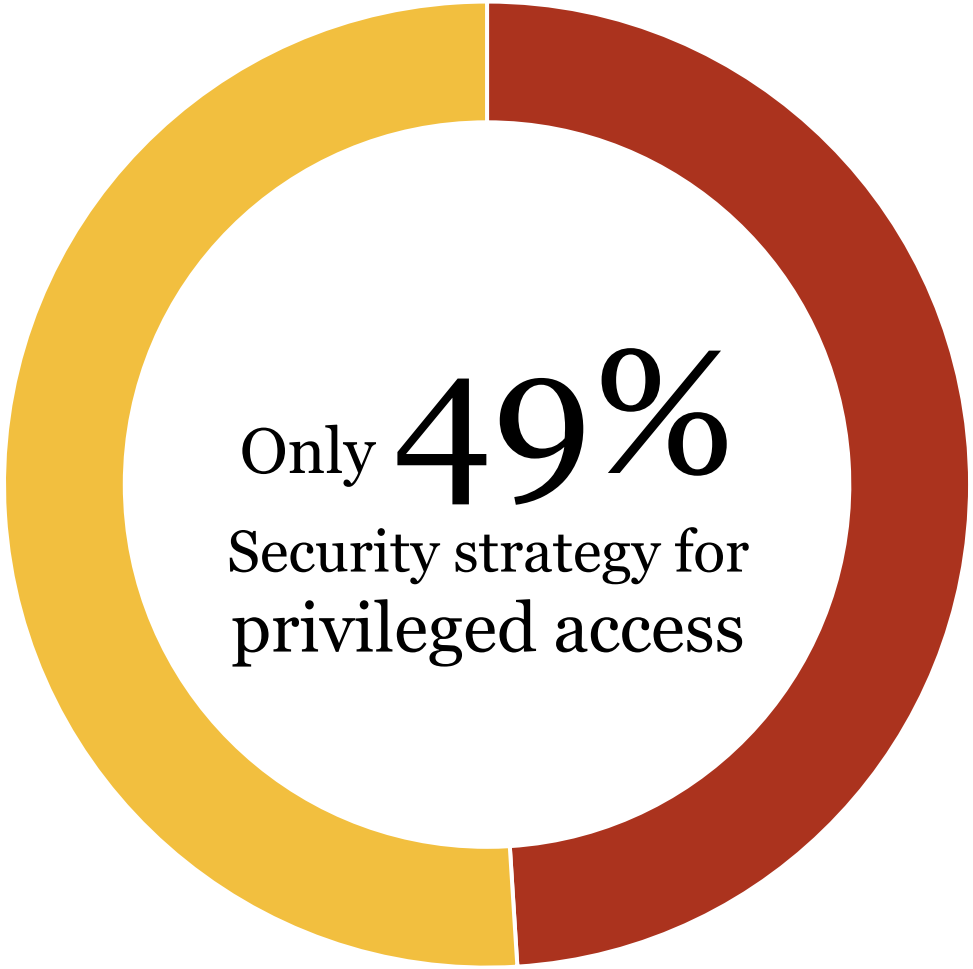
46%

Unauthoried access to to cloud management consoles

44%

Shared credentials across multiple systems and applications

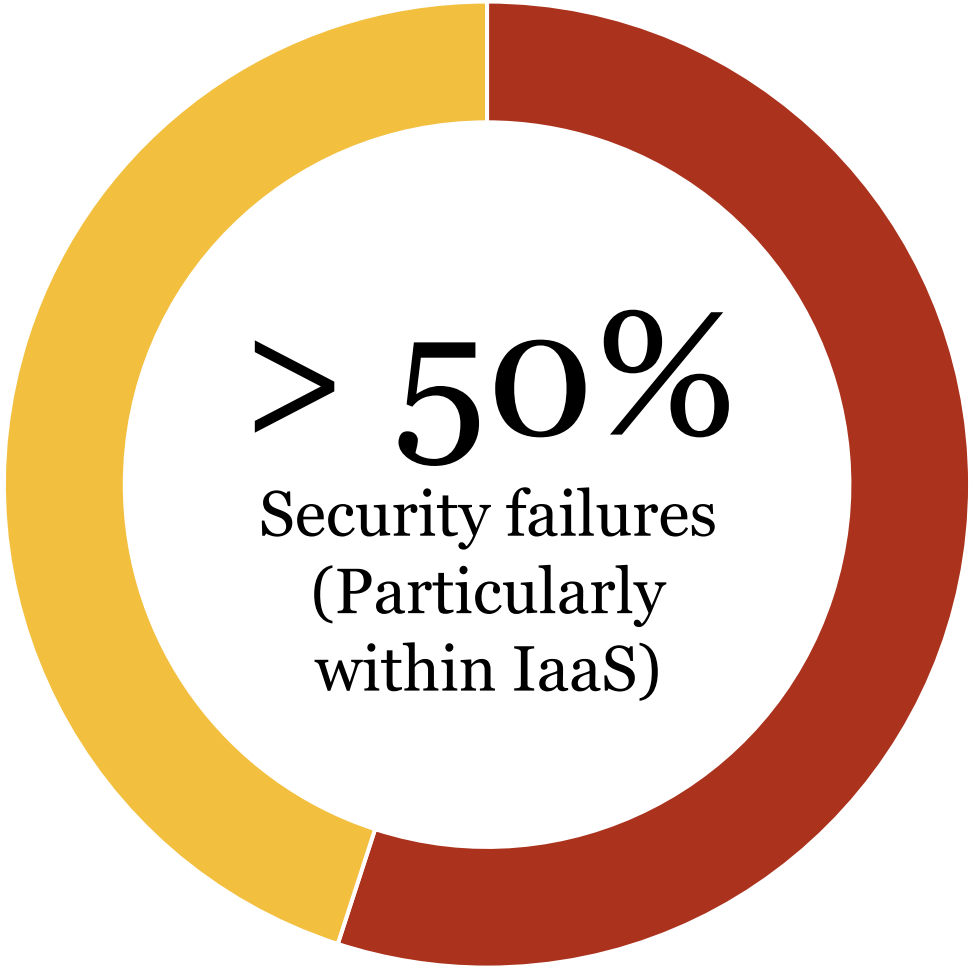
Despite #1 concern...



Do you still perform authorization without MFA?

Do you still have privileged accesses that are active after a maintenance?

Insufficient identity and privileged access management



Just Enough Access (JEA)
Just In Time (JIT)

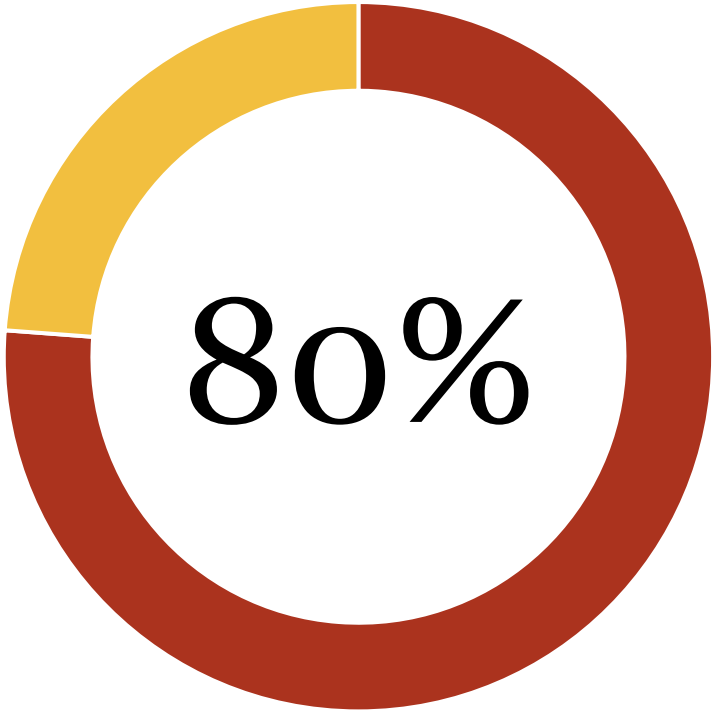
4

Space Stone
Logging and Monitoring

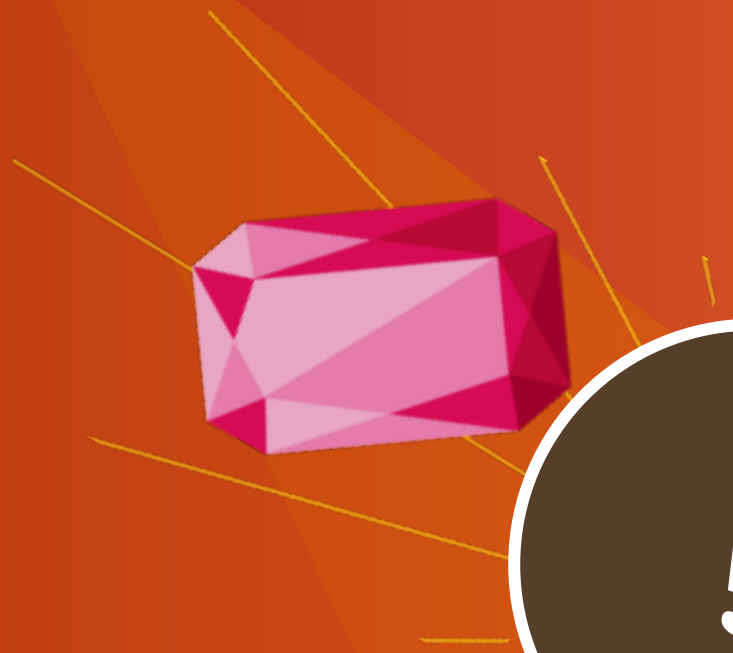
You can’t manage, what you can’t measure.
You can’t measure, what you can’t see.

Monica Verma

#1 *Privileged Access*



Security breaches involve privileged accesses



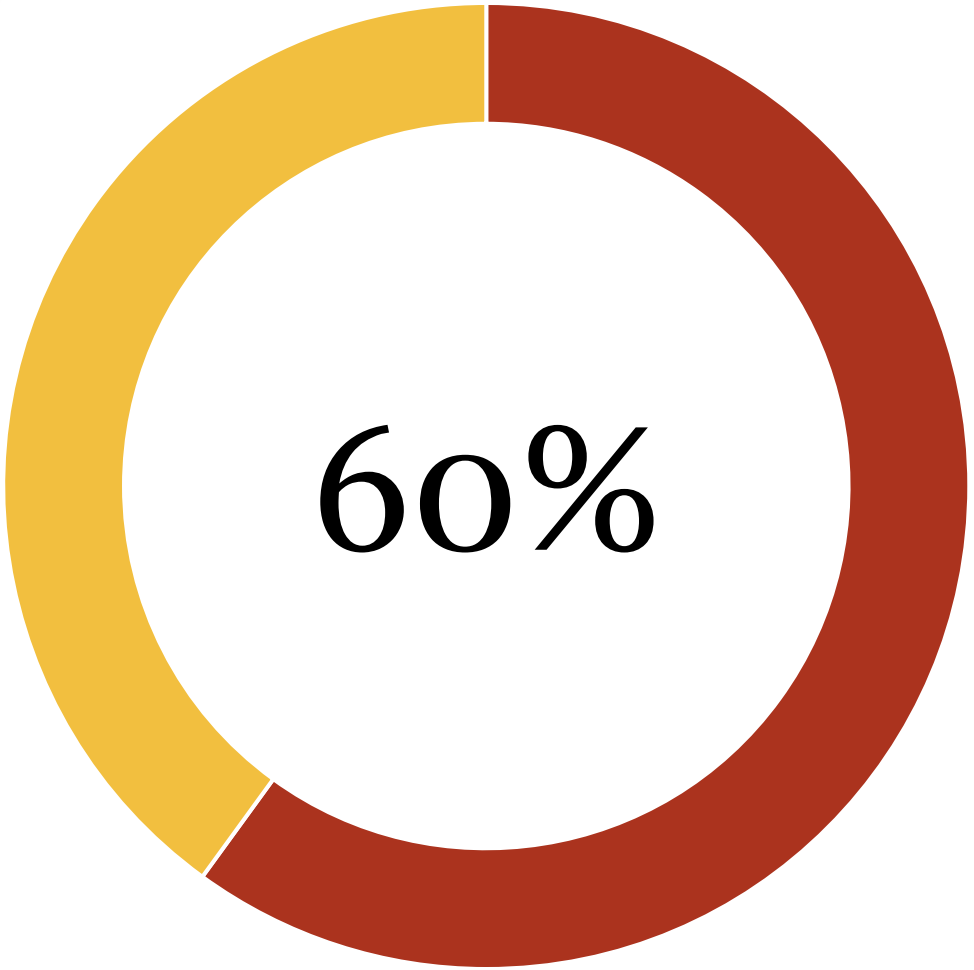
5

Reality Stone
Incident Management

Digital threats have become a part of everyday business.

Ole Erik Almlid, CEO, NHO

Who is responsible and accountable for a security breach?



Believe that **cloud service providers are responsible for a** breach

Through 2022, at least 95% of cloud security failures will be the customer's fault.

Gartner

EVERGE TECH REVIEWS SCIENCE CREATORS ENTERTAINMENT VIDEO MORE

POLICY REPORT TECH

The Capital One breach is more complicated than it looks

28

It can be hard to tell legitimate research from criminal enterprise

By Russell Brandom | Jul 31, 2019, 1:33pm EDT

SHARE

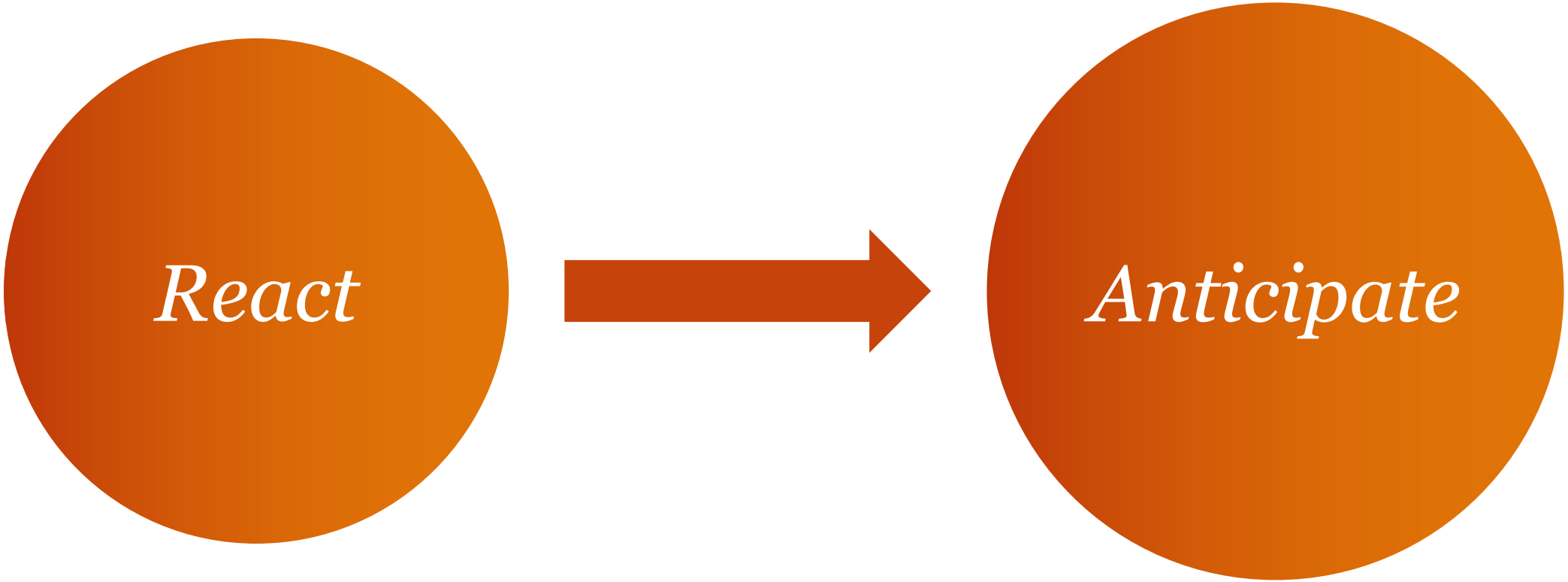
JOHANNES EISELE/AFP/Getty Images

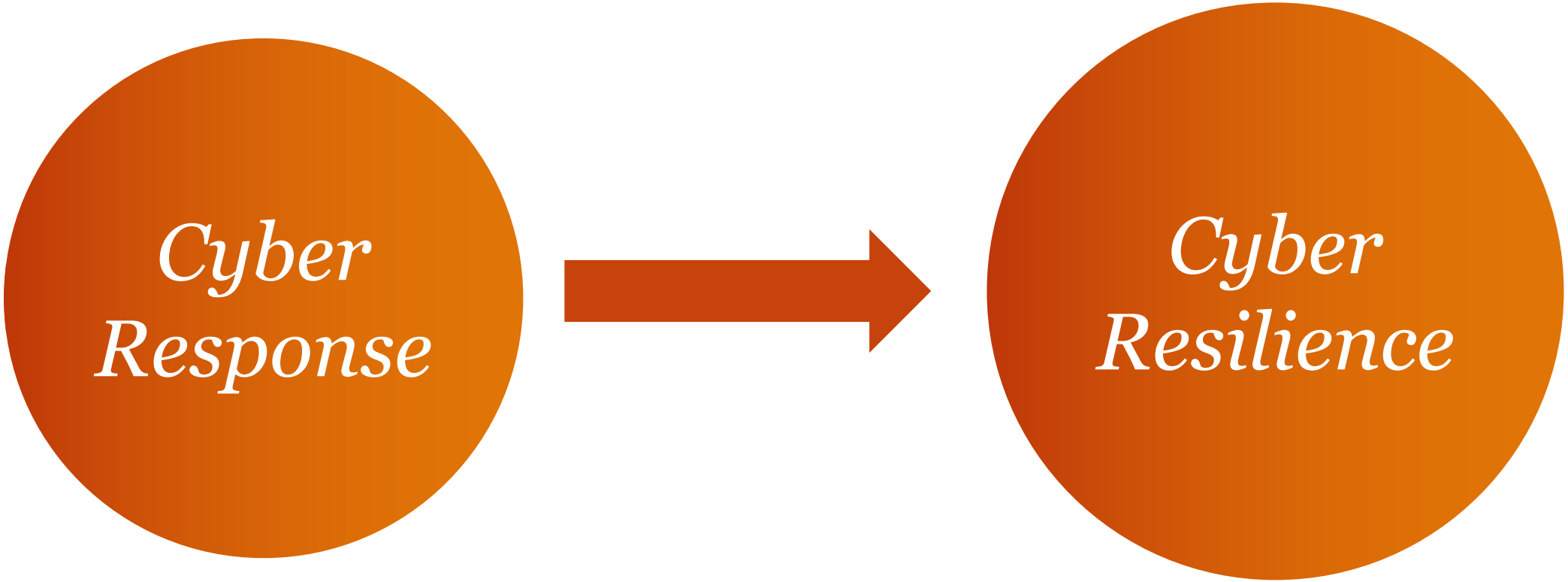
Customers control their own web applications and that no AWS infrastructure or services were compromised.

Amazon

Depends on
where and how
the incident or
the cyberattack occured

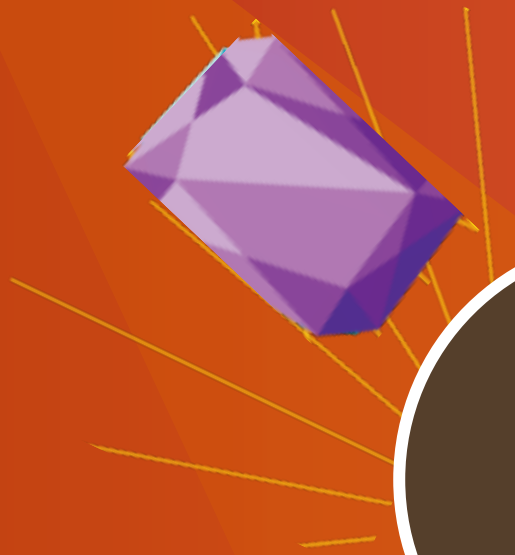
"I am inevitable."


React
Anticipate


Cyber Response
Cyber Resilience

Anticipate chaos! Be prepared!

Monica Verma



6

Power Stone
Automation

Automation

#1 *Automate: Early and often*

#2 *Automation of security baseline, security testing & maintenance*

#3 *Orchestration of configurations, security tools e.g. detection, and disaster recovery*

3R – Cloud Security Principle

RISK	REVIEW	RECOMMEND

FIND YOUR STONES. MANAGE THEM.

4. Space Stone
ging and Monitoring

2. Mind Stone
Strategy

Stone
on

eality Stone
dent Management

1. Soul Stone
Shared Responsi

tone
Privileged Access

@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma
MonicaTalksCyber.com

MONICA VERMA

THE BLOG ON ALL THINGS CYBER

Speaker. CISO. Award Winner.
Board CSA & Women In Cybersecurity.
Musings and thoughts on Security & Risk.
Host: We Talk Cyber.

Thank you!

@MonTalksCyber MonicaVerma MonicaTalksCyber

Monica Verma
MonicaTalksCyber.com