

RSA[®]Conference2020

San Francisco | February 24 – 28 | Moscone Center

HUMAN
ELEMENT

SESSION ID: HUM-W11

Nudging through Numbers



Sahil Bansal

AVP, Information Security

Genpact

<https://www.linkedin.com/in/sahilbansal86/>

#RSAC

Why most compliance messages fail – where security awareness programs lack



95% of cyber incidents involve human error,
Cyber threat – the biggest threat today
Are users deploying coping mechanisms?

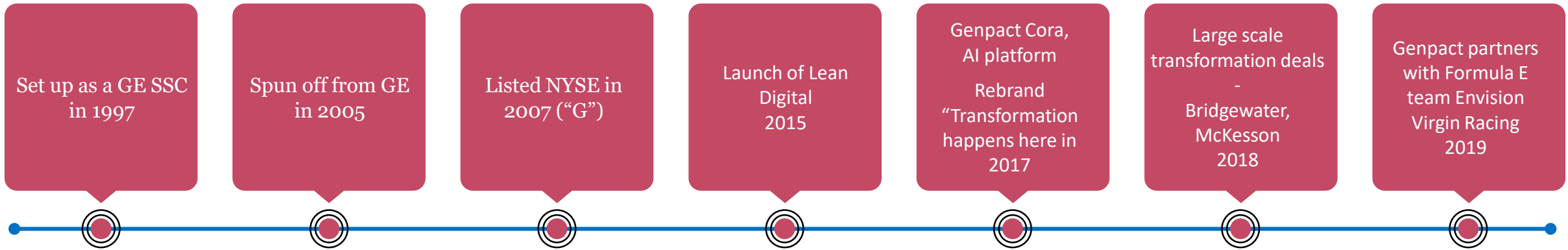
How We learn today



RSA®Conference2020

Introduction

Genpact at a Glance



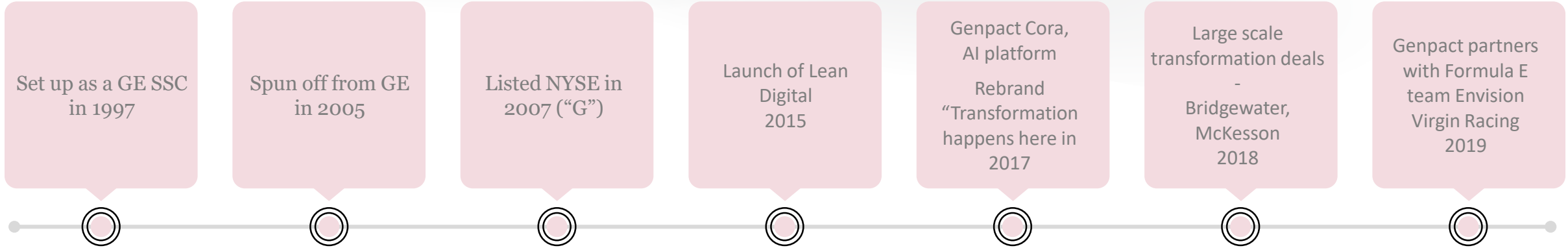
 70+ delivery centers,
25 countries

 47+ Languages

 Digital
Palo Alto, Boston, Tel Aviv, Delhi, Bangalore

 90,000+ Employees

Genpact at a Glance



 **70+**
delivery centers,
25
countries

 **47+**
Languages

 **Digital**
Palo Alto, Boston, Tel Aviv, Delhi, Bangalore

 **90,000+**
Employees

Our Program

Build a program

Baseline controls in place

Improve maturity

Increase Focus on Key profiles

Personalize Security Training



Our Program

Build a program



Baseline controls in place



Improve maturity



Increase Focus on Key profiles

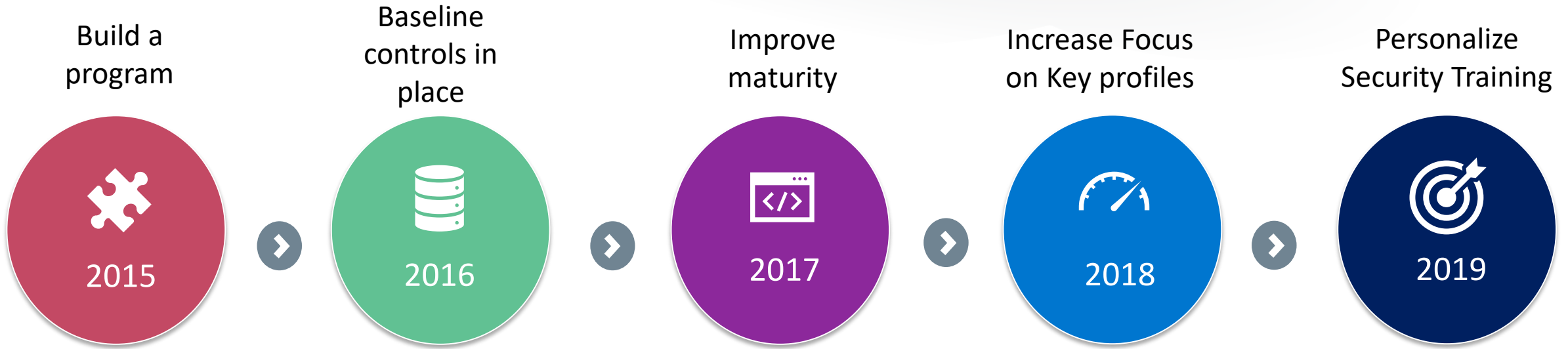


Personalize Security Training



elearning modules

Our Program



Assessments, Videos, SharePoint, Email, Quiz, Games, Events, Targeted trainings, Champions Program...

We seemed to be on the right track

Training completion rate



Our internal phishing click rates were



External Survey - Among
the top 2 for 3
consecutive years



But, were we?

Training completion rate



Our internal phishing click rates were



Security Violations

External Survey - Among the top 2 for last 3 years



What was causing it?

- Do users really understand the risks?
- Are we focusing on the right behaviors?
- Are users fully engaged?
- Are we measuring the right things?

What if

Do users really understand the risks?

Are we focusing on the right behaviors?

Are users fully engaged?

Are we measuring the right things?

- Security was easy to understand and part of users day to day job?
- Users are made aware of only what they need to know?
- Security was engaging and fun?
- The security behaviors could be measured?

Target

Do users really understand the risks?

Are we focusing on the right behaviors?

Are users fully engaged?

Are we measuring the right things?

- **Make it Easy**
- **Use Small Steps**
- **Make it Fun**
- **Measure it**

RSA[®]Conference2020

Introducing

My Cyber Score

An individualized Security Score based on the user's security behavior, threat profile, computer's health and privileges

What is my cyber score



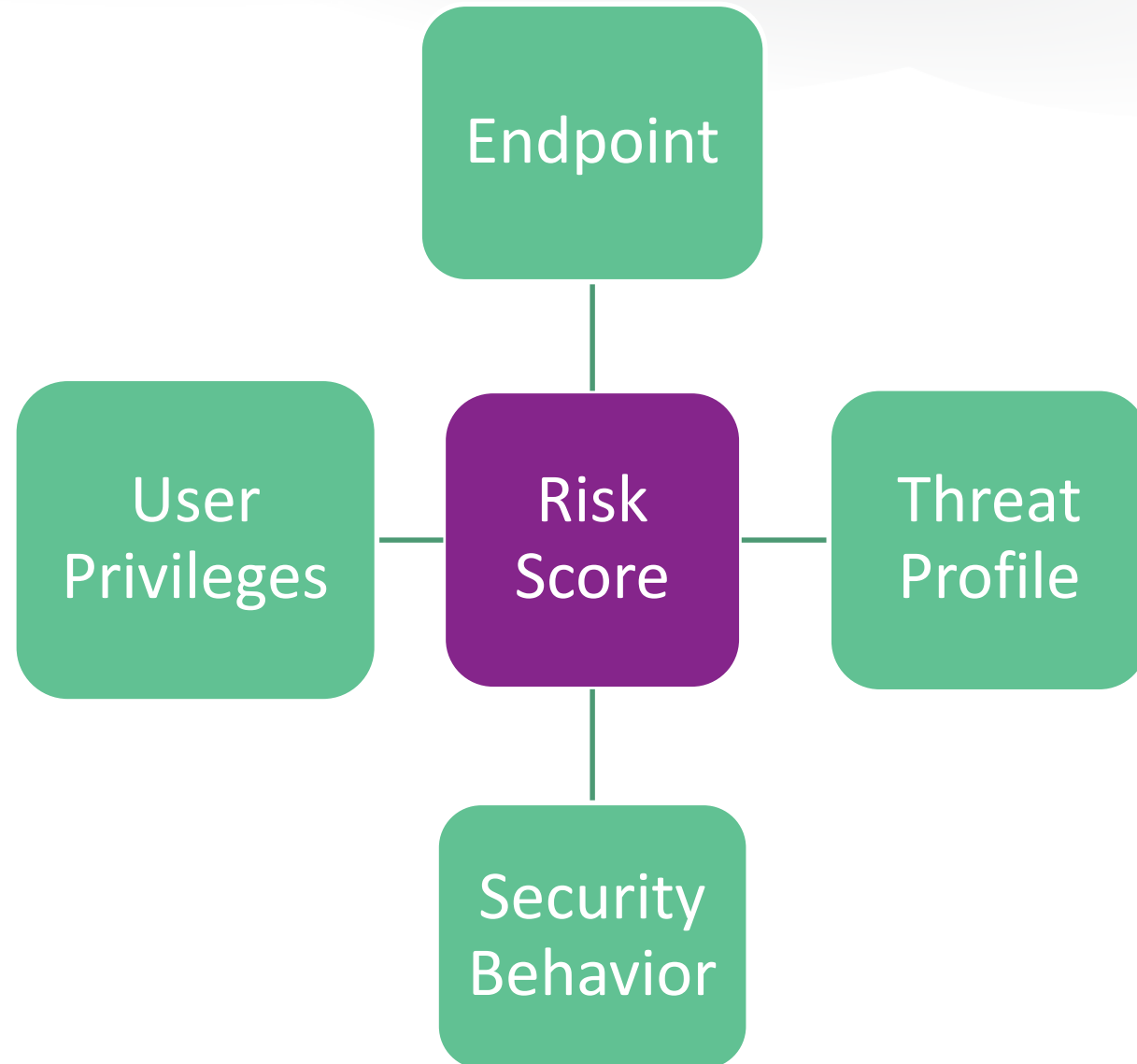
Key Considerations

- Internal Vs External
- Fast Vs Perfect
- One Score Vs Multiple Scores

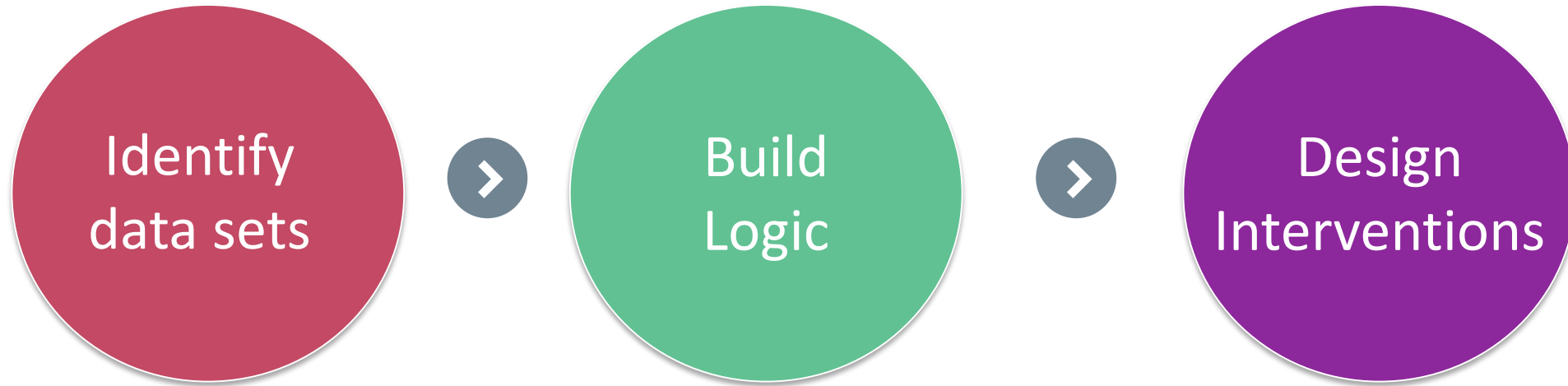
RSA[®]Conference2020

How did we go about it?

Step 1 – Identify Sources of Risk



Step 2 – Identify Data Sources, Build Logic and Design Interventions



Step 3 – Roll out Campaign

- Communication Plan
 - Communication team
 - IT and Infosec Leadership
 - Pilot Group Business Leaders
- Roll out campaign
 - Explain the concept – focus on WHY
 - Give helpline contact

Sample Email

genpact
Transformation Happens Here

What's your cyber score?



Hi ! Your cyber score is 277. Your Cyber Score has decreased from 330 to 277. Please take the steps mentioned in the email to improve your score.

What is cyber score?

Category	Score Range	Percentage
Poor	0 - 30	0% - 30%
Fair	30 - 60	30% - 60%
Good	60 - 90	60% - 90%
Outstanding	90 - 375	90% - 100%


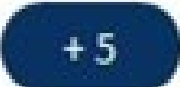




Personal Computer (PC) score: 71%

Oops... your device is missing security configurations.
 Raise a HelpMate ticket, using "My Cyber Score" category, to fix it.
 Be a Security Warrior and help us protect Genpact!

PC safeguards	Recommendation	Score impact
 Vulnerability status	You PC is missing security patches or critical security configurations. Raise a HelpMate ticket, using "My Cyber Score" category, to fix it.	+ 50
 Malware protection	The anti-malware tool on your system is up and running.	✓
 Encryption	Your Laptop is encrypted. Your data is safe.	✓
 Data protection	The Data Protection tool, that keeps sensitive data from leaking is up and running.	✓
 Internet security	Your connectivity to Internet is secure.	✓






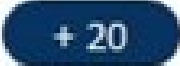


Behaviour score: 93%

Awesome!! You are exhibiting the right security behaviors. Keep it Up!

Behavior parameters	Recommendation	Score impact
 Phishing	You've steered clear of suspicious links and emails in all our assessments. However you have missed to report suspicious emails to information security team. Please keep up the good work and report all suspicious emails to the information security team.	
 Security incident	You haven't been involved in any security incidents. Way to go!	
 Role-based trainings	Your security trainings are complete.	
 USB access	You are protected against USB threats. Good going!	

Risk score: 85%

Watch out! You need to be more vigilant. Our systems have detected that:

Risk Parameters	Recommendation	Score Impact
 <p>Credential breach</p>	<p>Awesome! You were not part of any data breach. Your Credentials are safe.</p>	
 <p>Targeted malicious emails</p>	<p>We have not detected any targeted attacks (emails) heading towards you. You are protected for now!</p>	
 <p>Access to data (PII/SPI etc)</p>	<p>You have sensitive information on your system. We understand that you need this data in your day-to-day activities. However we recommend that you work towards improving PC Score.</p>	
 <p>Local Administrator Access</p>	<p>You do not have Local Administrator access on your PC. This helps in reducing security risks in Genpact!</p>	

Step 4 – Track Progress and Evolve

- Resistance to Change – Push required at start
- Track progress – number of tickets raised/interventions employees engaged in etc.
- Gather feedback
 - Leadership buy in– VoC will help to upgrade to bigger audience
 - Employees

RSAConference2020

Outcome

Outcome

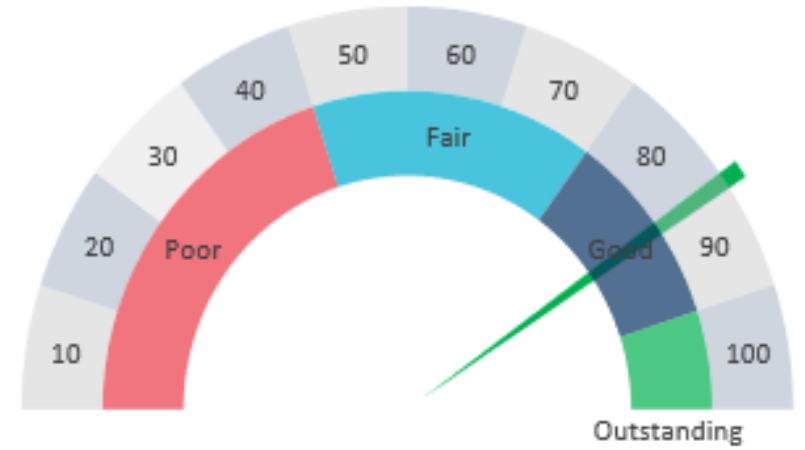
- Holistic user score based on 20+ parameters
- 30% increase in user tickets and queries
- Focused remediation of defects led to lower risk

Case Study

Month 1

What's your cyber score?

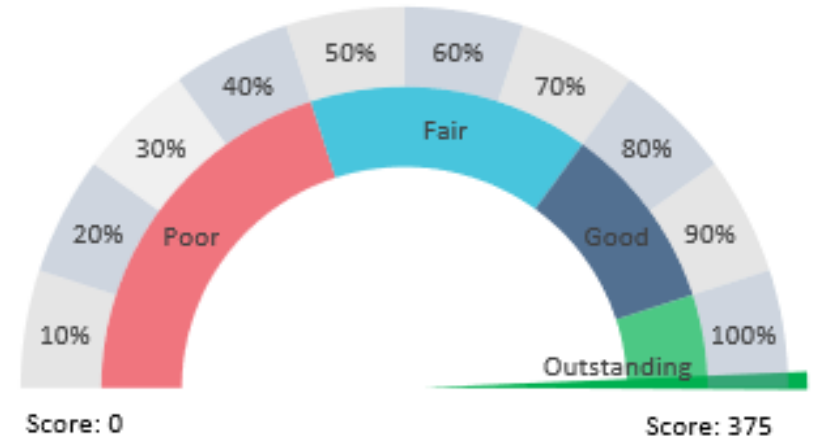
Hi [redacted] Your cyber score is **300** Good job! By the way, the average score of Genpacters is 306.



Month 2

What's your cyber score?

Hi [redacted] Your cyber score is **370** Great Job! Your Cyber Score has increased from 300 to 370. Keep up the good work!



Leadership Feedback

“Its very cool”

Vidya Srinivasan

Global Risk Leader,
Genpact

***“This is Super
Awesome and
coming along really
well”***

Ramachandra Hegde

Chief Information
Security Officer,
Genpact

***“Guys, Fantastic
progress and am so
very keen to see this
go places. Kudos to
all of you behind
this!!!!”***

Sriram Lakshman

Global Security
Assurance Leader,
Genpact

Next Steps for Us

- Increase scope
- Add more nudges
- Build more accountability
- Automate System
- Near-Real time scoring
- Get more leaders onboard

RSA[®]Conference2020

Apply

What you should do Next Week

- Identify if your users feel burdened with security training
- If there are security incidents –
 - either users are not getting the right training or
 - the training is not effective or
 - they are making mistakes
- Do you have security behavior/culture metrics? What does it include?

3 Months Plan

- Identify existing data sets
 - Work with IT don't just look at training
 - End Point tells a lot
- Which behaviors are the most important
- Work on a logic to score users
- Get stakeholders onboard for a pilot
 - Start where the risk is the highest
 - Get Privacy team onboard

6 Months Plan

- Roll out the pilot to a limited group
 - Align it to your company's culture
- Gather feedback
- Take decision on next steps

RSA[®]Conference2020

Questions?