



Using Network Analysis Technology to Measure Organizational Inclusiveness

Today

- The case for inclusion
- What is network analysis?
- Case studies
- Latest from our Lab

The case for inclusion is self evident

FIGURE 2 | The case for an inclusive culture

Organizations with inclusive cultures are:



2x

as likely to meet or
exceed financial targets



3x

as likely to be
high-performing



6x

more likely to be
innovative and agile



8x

more likely to achieve
better business outcomes

Source: Juliet Bourke, *Which Two Heads Are Better Than One? How Diverse Teams Create Breakthrough Ideas and Make Smarter Decisions* (Australian Institute of Company Directors, 2016).

Deloitte Insights | deloitte.com/insights

Diverse & inclusive organizations outperform

85%

CEOs

80%

Outperform

15%

Gender

35%

Ethnic



9-418-070


MARCH 13, 2018

BORIS GROYSBERG

KATHERINE CONNOLLY BADEN

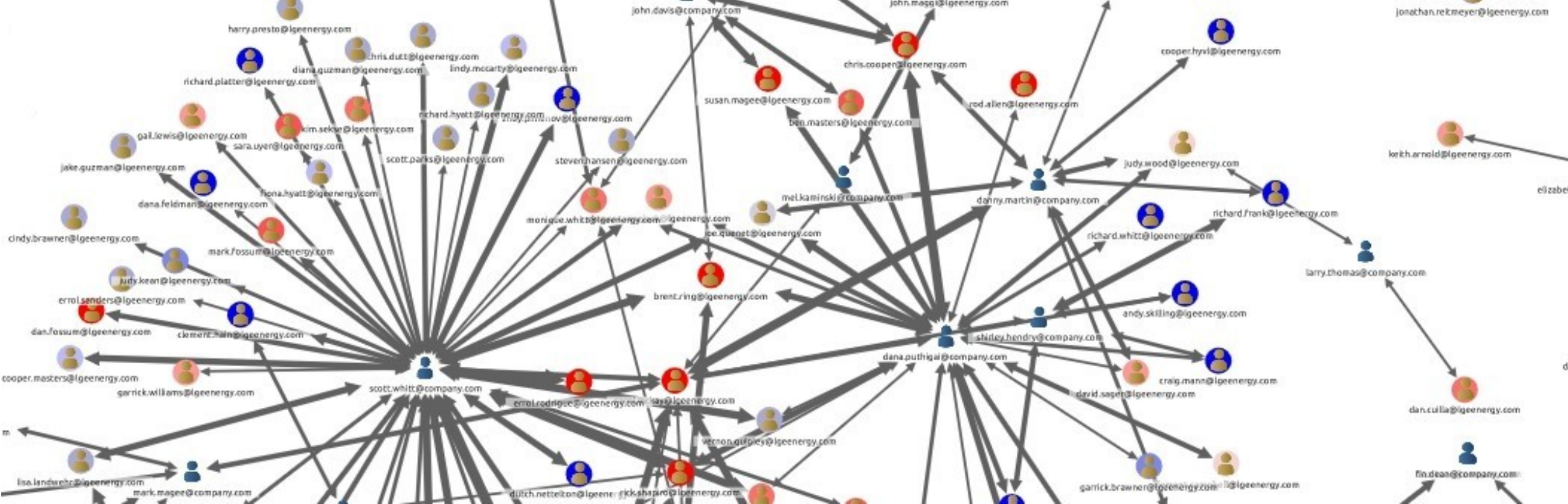
TrustSphere: Building a Market for Relationship Analytics

Manish Goel hung up the phone in his office in Singapore, leaned back in his chair, and started to reflect on the conversation he had just had with his team and a prospective customer. Goel was the CEO of TrustSphere, a seven-year-old company in the data analytics industry that focused squarely on relationship analytics, a space in which TrustSphere was pioneering a unique technology and solutions in the areas of sales, risk, and people analytics. Essentially, TrustSphere's technology allowed its



*Recognized by leading analyst
as a provider of SNA/ONA
technology to measure
inclusion*

Gartner®



Network Analysis

Social Network Analysis (SNA)
Organizational Network Analysis (ONA)

Workforce dynamics are changing rapidly



Leadership



Talent



Diversity &
Inclusion



High-Performing
Teams

Data science, networks and measurement help navigate
this new paradigm

Measuring how an organization collaborates using ONA “Relationship Strength”



Network Analysis: measuring & visualizing patterns



Everyone had a view about how it looked...



- Objective
- Evidenced
- Observed

The Blue Marble (December 7, 1972)

TrustSphere's Relationship Analytics Platform

Our Solutions



Technology Partners



Consulting Partners



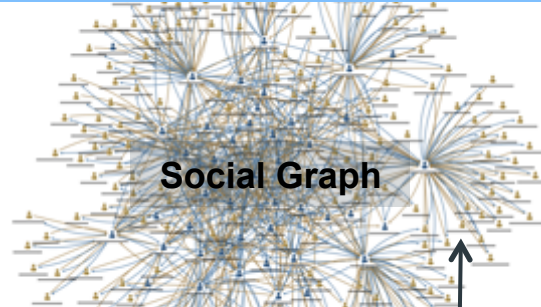
APPLIED ANALYTICS INSIGHTS

Organizational Network Analysis / Social Network Analysis

People Analytics

Sales Analytics

Relationship Analytics API



Relationship Analytics Platform

Data is sourced from digital interactions, analyzed and the resulting analytics are either embedded in business applications or available for further business analysis

EMAIL

VOICE

COLLABORATION

DIGITAL INTERACTIONS

Passive ONA: observed analysis, at scale

Over **10 billion** data points processed

200 million ties/edges

Committed to respecting privacy

- No content analyzed. Not even subject lines.
- GDPR and privacy legislation compliant
- Ethics are core to our values
- Other techniques for highly sensitive environments

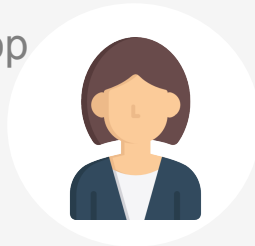


Cases and solutions

Case Study: Gender Diversity

CLIENT

A global asset management firm who wanted to understand why females weren't making it to the top of their organization



CHALLENGE

Find out if there are significant differences in the networks that male and female employees build, and if that impacts an employee's promotion.



SOLUTION

Analyze the networks of all male and female employees and see if they build different working relationships, access, networks and correlate that with promotion data



OUTCOME

Identified significant differences in the types of networks that promoted males and females built. Provided input into training program to help female employees build the right internal networks.

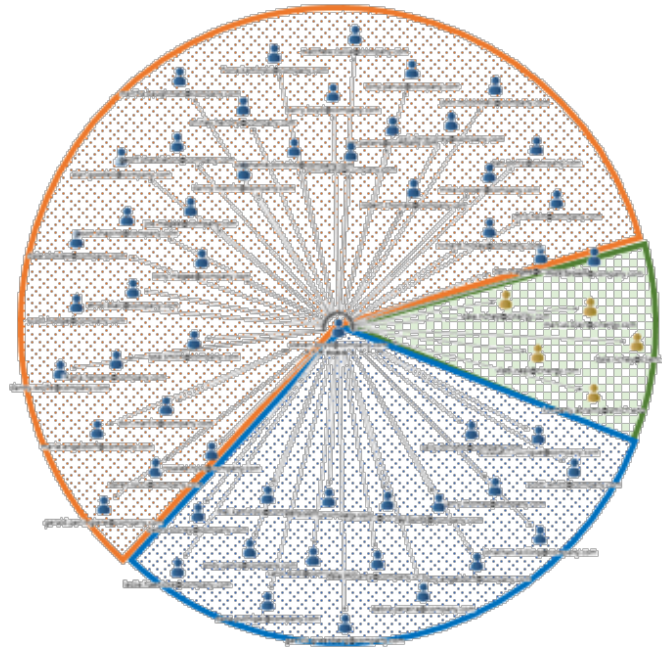


Measuring inclusion to leverage diversity

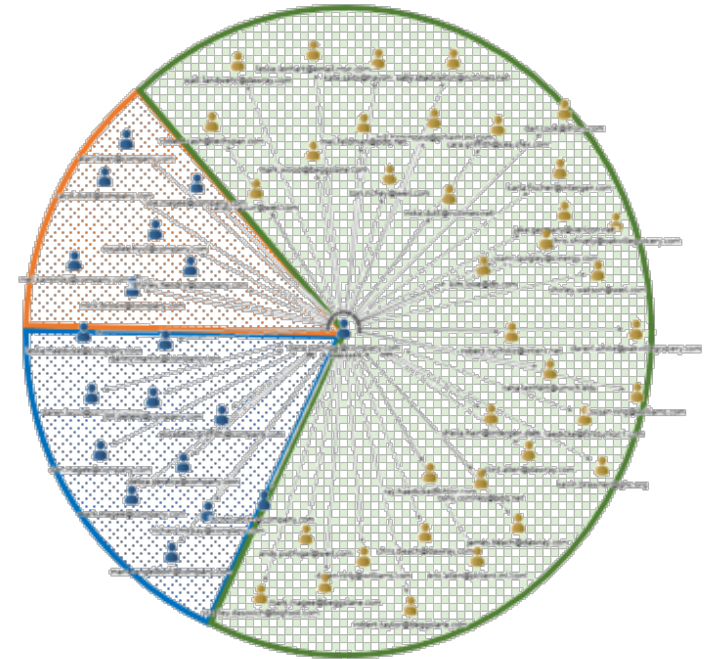
Individuals with a stronger network, especially those with strong relationships with individuals higher up in the hierarchy have a higher likelihood of promotion.




Do significant differences exist in the networking behaviors of men and women?

Male Employee's strongest relationships



Female Employee's strongest relationships

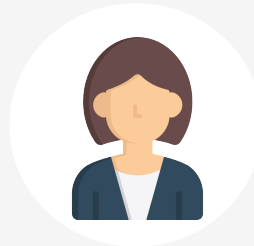


Relationship Type		Male Relationships	Female Relationships
	External	5	37
	Same Grade or higher	35	7
	Lower Grade	18	11

Case Study: Homophily

CLIENT

A luxury goods conglomerate wants to understand breeding of homophily in APAC business



CHALLENGE

Find out if homophily was impacting integration between European and Asia employees and if that was affecting the performance and promotion of Asian employees



SOLUTION

Analyze the networks of European and Asian employees for empirical evidence of homophily in informal network ties to establish the effects on position and potential for future career advancement



OUTCOME

Project in progress



Latest from our Lab

Surfacing “actionable insights” by measuring inclusive behaviors and helping individual leaders reduce unconscious bias and drive change from the ground up.

Creating “Nudges”



Diversity & Inclusion Summary

Name: Company.com Pte Ltd

While most companies are chasing a 50:50 number to achieve a diverse workforce, it's time we measure an **inclusion mindset** that is a necessary precursor to **diversity**.

Diversity & Inclusion

An understanding of how diverse your network is

Your Network

Strong Relationships with	Males	Females
Senior Level	30	38
Mid Level	44	61
Junior Level	96	41

Average Participant's Network

Strong Relationships with	Males	Females
Senior Level	17	21
Mid Level	36	54
Junior Level	87	49

Did you know? Equality in the workplace encourages workers from all backgrounds to feel confident in their ability and achieve their best. The higher the team morale, the more productive employees are.

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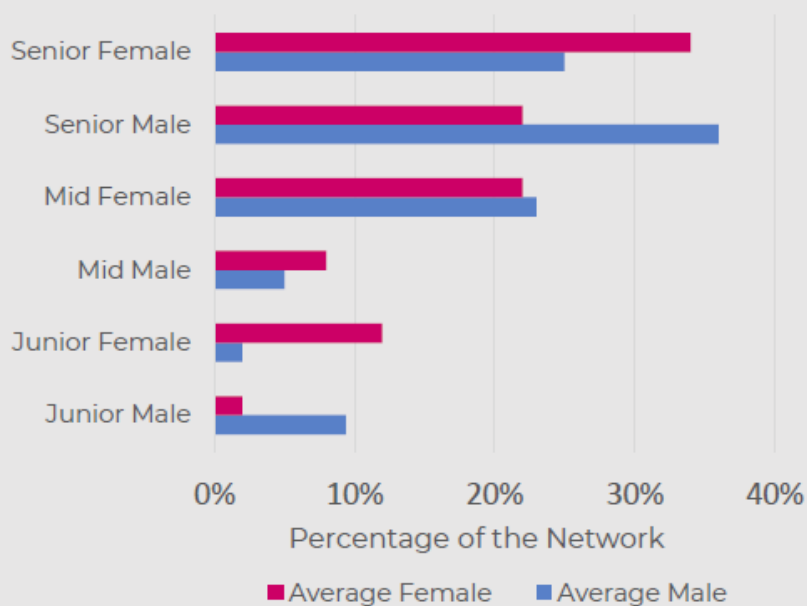
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7. Diversity & Inclusion

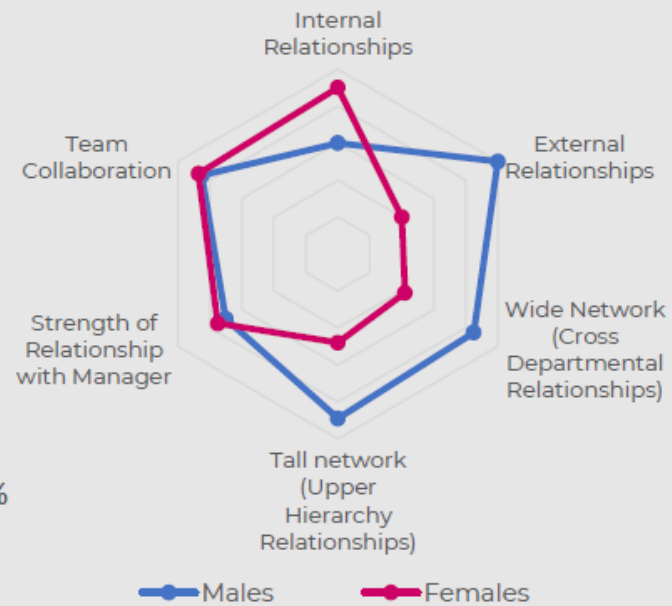
An understanding of male and female's networks in the organization.

Insight: It was observed that there is homophily in networks of females and heterophily in networks of males.

Network Distribution by Gender & Hierarchy



Gender Differences in Network Characteristics



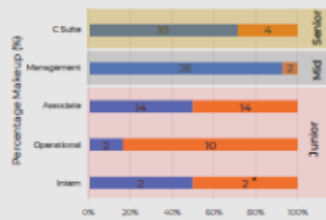
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1. Gender Observations

Is there a difference in the networks that males and females build?

Gender Distribution by Hierarchy

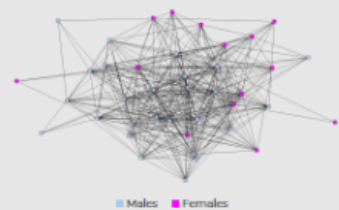


*Represents the number of female employees in hierarchy level: Intern

*How to read graph: 13% of an average Senior Male's network is with other Senior Males, while 35% is with other Mid Males.

Is there an unconscious bias in the way males and females network within the organization?

Company.com's Network Graph colored by Gender



*How to read graph: There is 100% collaboration among Senior Males. I.E. All of the Senior Males have strong relationships with each other.

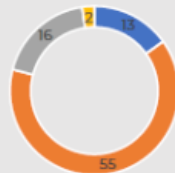
Average Network Composition by Gender & Hierarchy

	Senior Male	Senior Female	Mid Male	Mid Female	Junior Male	Junior Female
Senior Male	13%*	10%	25%	3%	16%	32%
Senior Female	20%	25%	19%	6%	8%	22%
Mid Male	16%	11%	23%	3%	19%	27%
Mid Female	16%	12%	16%	0%	19%	38%
Junior Male	19%	18%	15%	5%	17%	26%
Junior Female	21%	4%	14%	7%	21%	32%

2. Age Observations

Do networks and relationships change with the age of the employee?

Population Distribution by Generation



■ Gen Z ■ Millennials ■ Gen X ■ Boomers

Collaboration Matrix by Generation

	Gen Z	Millennials	Gen X	Boomers
Gen Z	64%			
Millennials	25%	50%		
Gen X	0%	51%	66%	
Boomers	0%	39%	63%	100%

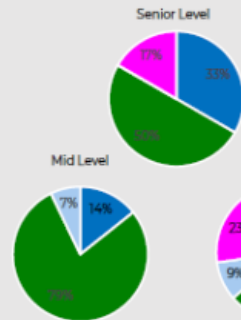
*How to read graph: There is 63% collaboration between Gen X and Boomers.

Boomers: Born from 1946-1964 | Generation X: Born from 1965-1976 | Millennials: Born from 1977-1995 | Gen Z: Born from 1996 -

3. Ethnicity Observations

How ethnically diverse are the networks that our employees build?

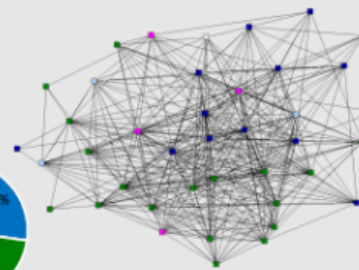
Ethnicity Distribution by Hierarchy



■ Indian ■ White / Non-Hispanic ■ Filipino ■ Chinese ■ Malay

Interpreting the social network graph: It can be observed that the Indian group builds most of their relationships within themselves.

Organization's Social Network Graph colored by Ethnicity



Collaboration Matrix by Ethnicity

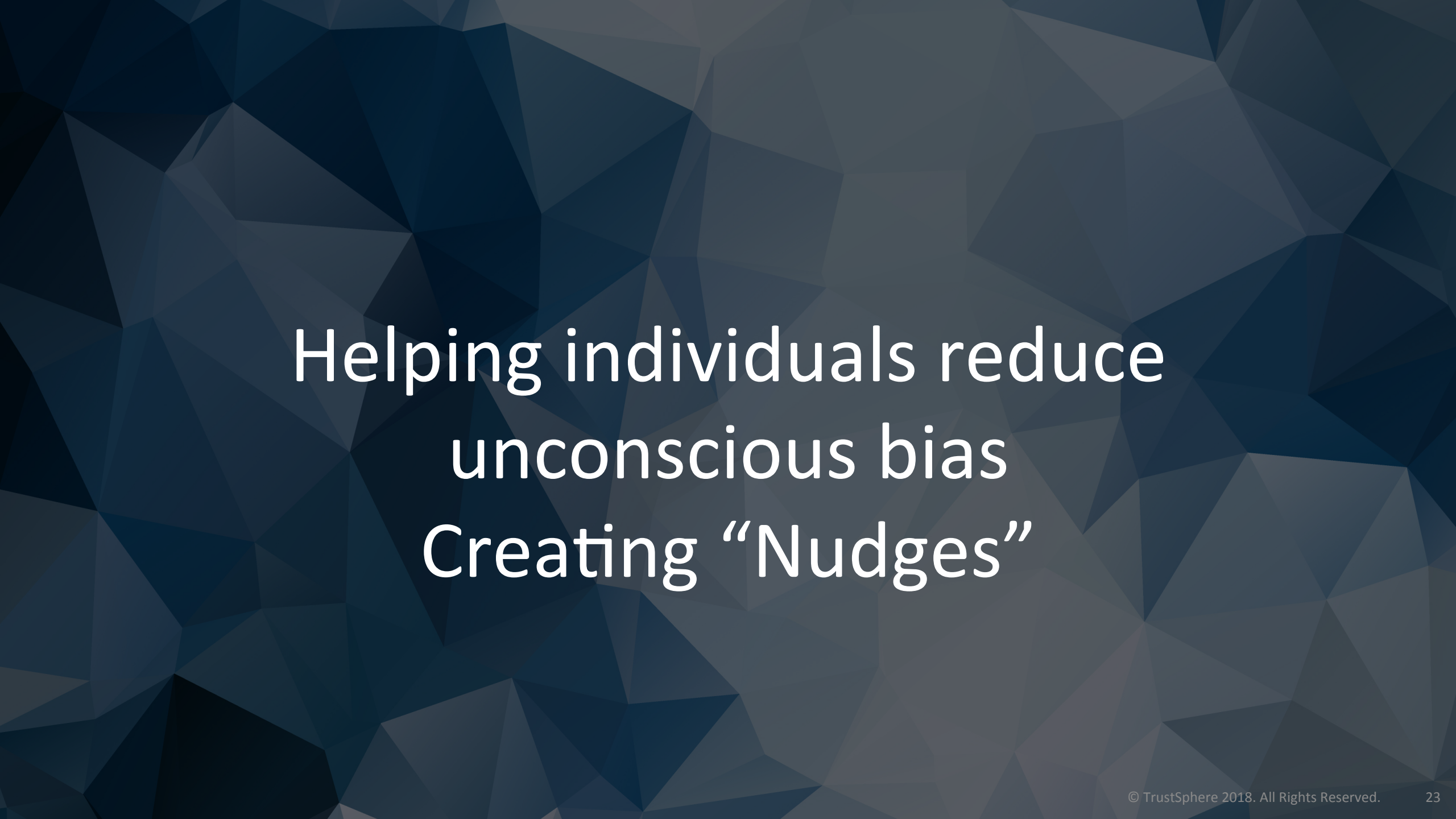
	Indian	White / Non-Hispanic	Filipino	Chinese	Malay
Indian	65%				
White / Non-Hispanic	43%	52%			
Filipino	44%	49%	33%		
Chinese	52%	43%	60%	40%	
Malay	46%	21%	67%	40%	-

*Collaboration is calculated by the percentage of intra ethnicity strong relationships that exist of the possible intra ethnicity strong relationships.

Benefits of having an Inclusive & Diverse organization:

1. Gender-diverse companies are more likely to perform 15% better¹
2. A 10% increase in a company's age heterogeneity can improve a company's² productivity by 3.5% annually
3. Ethnically-diverse companies are more likely to perform 35% better¹

Sources:
¹Letang, T., & Vulpes, E. V. (2017, May 25). Inclusion and Employee Diversity: Here are the Numbers.
²W., & S. D. (2008, February 20). The Impact of Aging and Age Diversity on Company Performance



Helping individuals reduce unconscious bias Creating “Nudges”

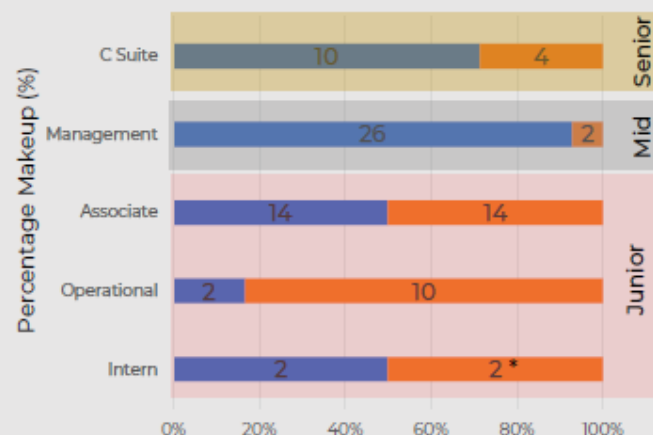
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■ Males ■ Females

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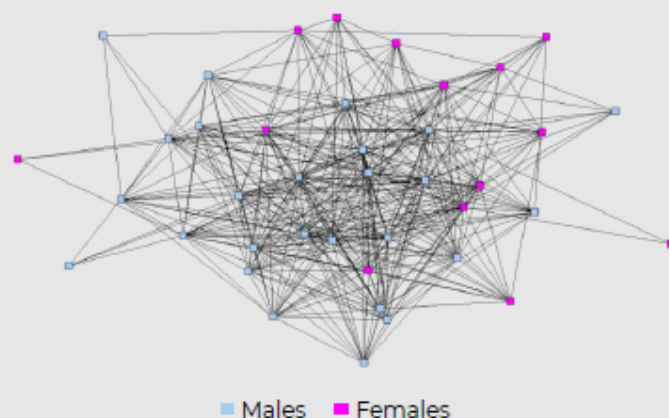
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Collaboration* Matrix by Gender & Hierarchy

		Senior Male	Senior Female	Mid Male	Mid Female	Junior Male	Junior Female
Senior	Senior Male	100%*					
	Senior Female	74%	75%				
Mid	Mid Male	86%	56%	65%			
	Mid Female	100%	69%	69%	100%		
Junior	Junior Male	62%	42%	44%	5%	31%	
	Junior Female	60%	71%	30%	92%	32%	38%

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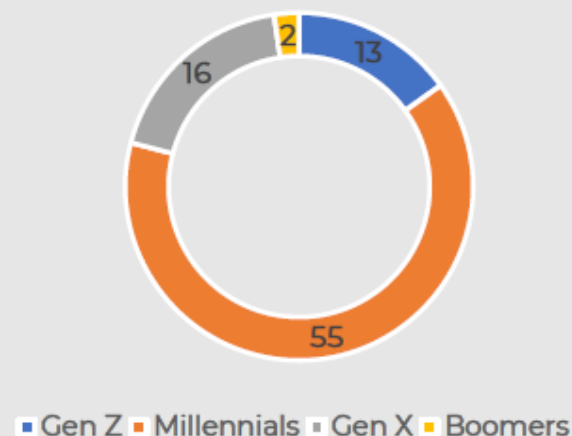
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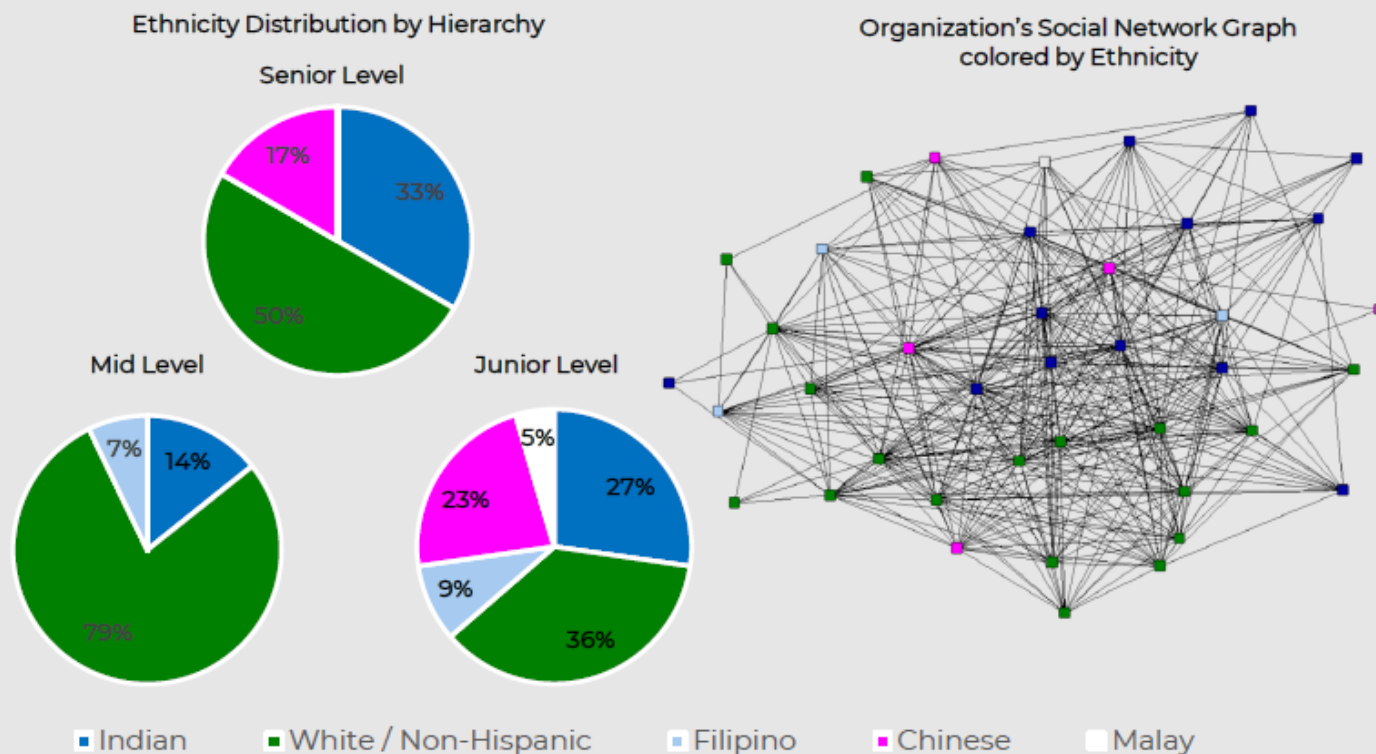
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