

THE WAR FOR TALENTS

DIVERSIFYING THE TECH WORKFORCE

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OUR MAIN TOPICS TODAY

1. The War For Talents – What Is It?
2. The War For Talents – Numbers
3. Gender and Tech – Numbers
4. Gender and Tech – The Glass-ceiling
5. Millennials and Tech – Demographic Change
6. Millennials and Tech – Numbers
7. Are Emerging Technologies diversity-biased?
8. Why Diversity is important!
9. Diversity & Tech @ NCI Agency
10. Contacts

THE WAR FOR TALENTS

- If you had the best talent in the world, what would you need to do to attract and retain them?
- One of the most complex challenges we have seen in the last decade is "**winning the War for Talents**"
- Organisations like Facebook aren't just looking for people; they are looking for the best ones, hence making the **job market extremely competitive**





SHORTAGE OF SKILLS

By 2020, over 1.8 million cybersecurity jobs will not be filled due to a shortage of skills



FINANCIAL IMPACT

By 2030, demand for skilled tech talents will outstrip supply, resulting in a global talent shortage of more than 4.3 million workers. The financial impact of this talent shortage could reach \$449.70 billion in unrealized revenue by 2030



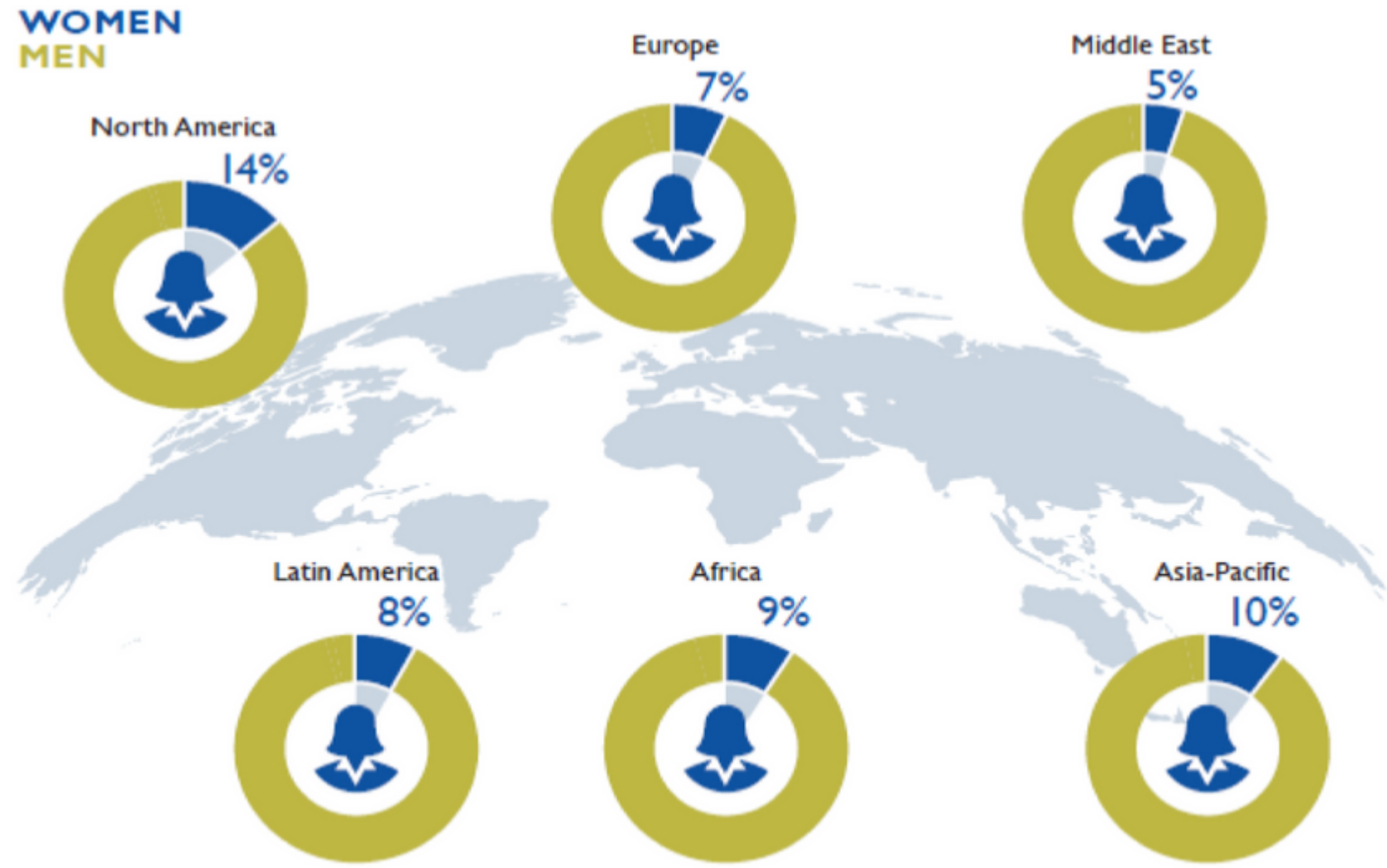
JOB-MARKET IMPACT

In the US only, according to the US Bureau of Labour Statistics, 1.4M Tech jobs will be waiting for STEM graduates by 2020 with a shortfall of 1M vacancies

The total number of women employed globally in the cybersecurity profession stands at 11%, which is the same rate of participation as 2013. According to the National Center for Education Statistics, 28% of bachelor's degrees in computer and information science went to women in the year 2000; in 2016 it was 18%.

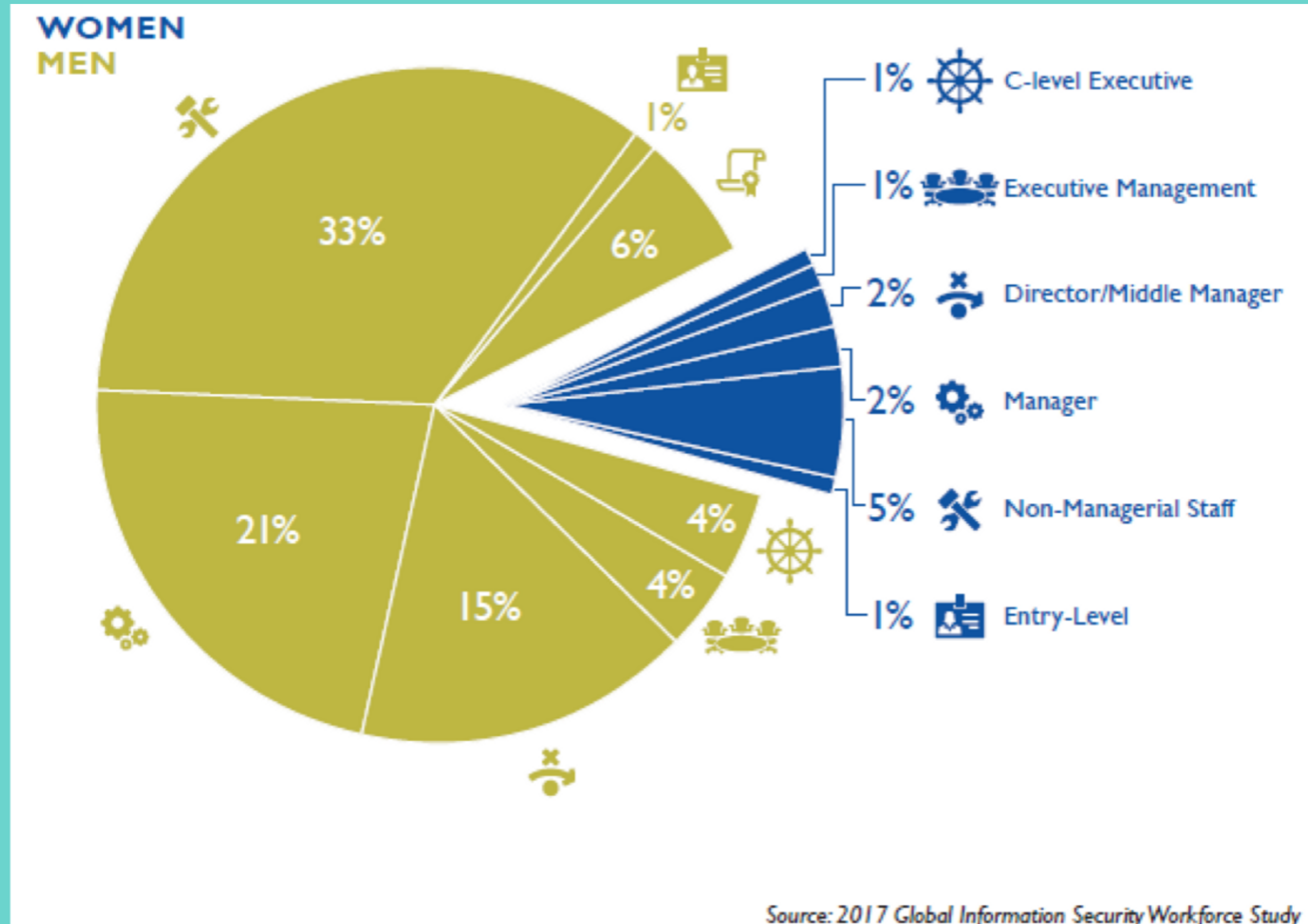


Exhibit #1: Male and Female Cybersecurity Workforce Composition, by Region



Source: 2017 Global Information Security Workforce Study. (n=19,641)

Gender Diversity by Organisational Position



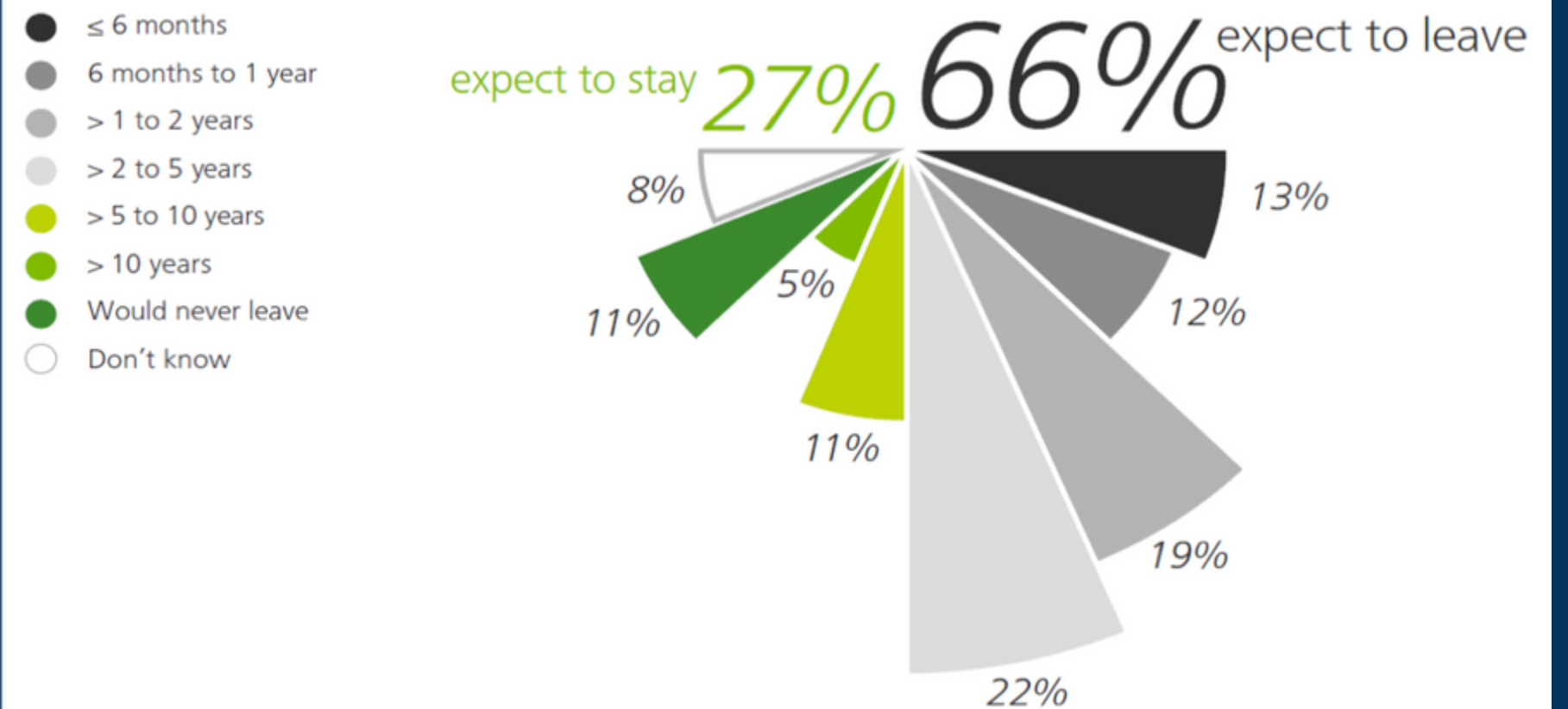
The composition of the workforce is changing dramatically:

- By 2020, Millennials will comprise 50% of the workforce
- By 2025, Millennials will comprise 75% of the workforce

This change in demographics brings new values, attitudes, expectations and ways of working



Figure 1: Two in three Millennials expect to leave by 2020
Percentage who expect to leave in the next...



Q. If you had a choice, how long would you stay with your current employer before leaving to join a new organization or do something different?

ARE EMERGING TECHNOLOGIES DIVERSITY BIASED?

- It is being increasingly acknowledged that AI systems are often biased, particularly along race, disability and gender lines.
- It has been well publicized that facial recognition is far more accurate with lighter-skin men than with women and, especially, with darker-skin people.
- In Amazon's efforts to use A.I. for hiring, the computer models were being trained using résumés submitted over the past 10 years, and most came from men. Therefore it was "taught" that men were better job candidates.
- Google had come under fire when research showed that when a user searched online for "hands," the image results were almost all white.
- When typing CEO on Whatsapp, the only Emoticon showing up a year ago was the one of a white man.

A MCKINSEY STUDY FOUND OUT THAT ETHNICALLY DIVERSE COMPANIES **WERE 35% MORE LIKELY** TO OUTPERFORM THEIR COMPETITORS IN TERMS OF PROFITABILITY

IN THE "MIX THAT MATTERS" STUDY, BCG DEMONSTRATED THAT INCREASING DIVERSITY LEADS TO MORE AND **BETTER INNOVATION** (45% AGAINST 26%) AND **IMPROVED FINANCIAL PERFORMANCE**

Top 10 **benefits** of workplace diversity



DIVERSITY & TECH @ NCI AGENCY

- TARGETED CAMPAIGNS WITH TECH UNIVERSITIES IN THE EURO-ATLANTIC AREA - ONE TECH NATO
- ESTABLISHMENT OF THE D&I AND WOMEN EMPOWERMENT PROGRAMME
- MENTORSHIP PROGRAMME
- INTERNAL MOBILITY TO ENHANCE THE DIVERSITY OF SKILLS
- STRATCOM CAMPAIGNS TO ENHANCE DIVERSITY AND INCLUSION IN CYBER AND JISR DOMAINS
- ESTABLISHMENT OF YOUNG PROFESSIONALS PROGRAMME
- REMOVING GENDER AND DIVERSITY BIASES FROM RECRUITMENT

Diversity is being invited to a party, Inclusion is being asked to dance...

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Thank you!

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