

The Gender Pay Gap In Engineering 2

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@ Gender Pay Gap Conference,
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Women's Engineering Society

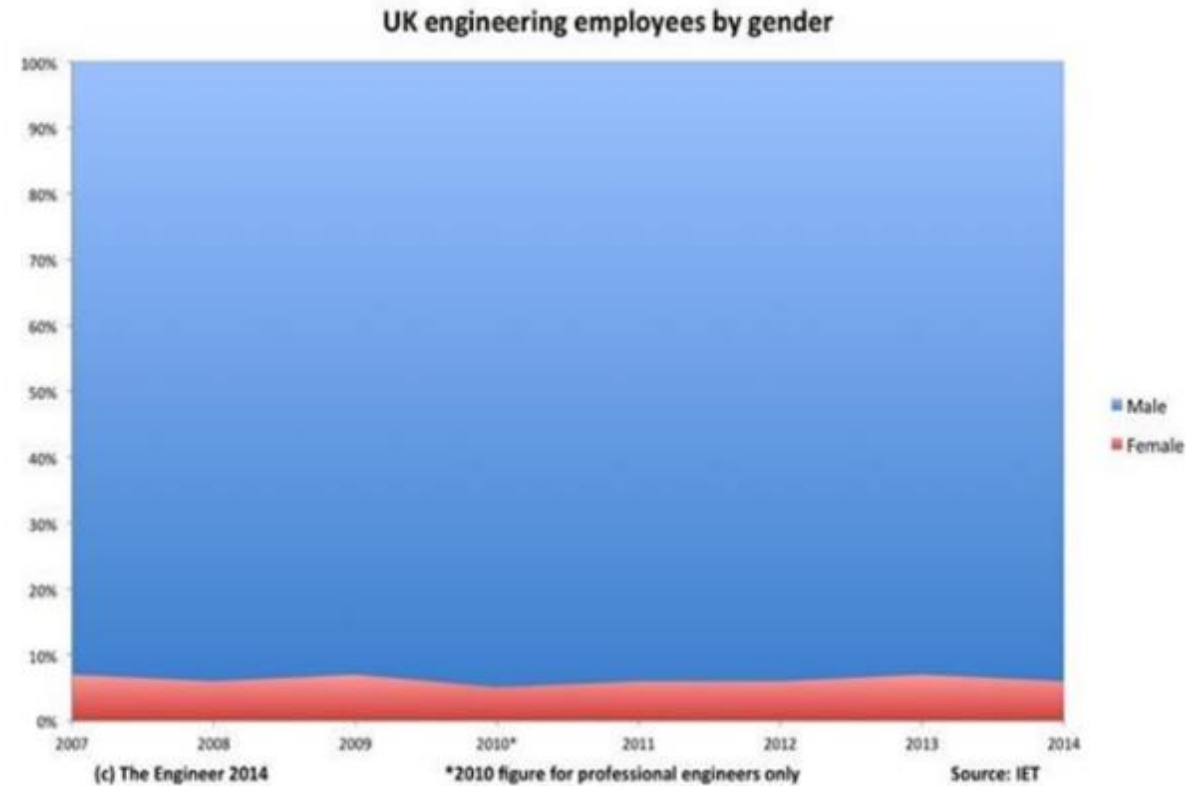


- Started on the 23 June 1919, we are a membership organisation...
- We are a diverse group, with only two things in common...



Review the background...

- Women make up
 - 6%/11% of technical/professional engineers
 - 15-17% of digital tech workforce
 - 13% of members of RICS
 - <1% of workers on construction sites
- Comparisons
 - ✓ 46% of doctors
 - ✓ ~50% of chemistry students in the UK
 - ✓ 30% of engineering students in India
 - ✓ The UK is bottom of the EU league in terms of diversity in engineering



A very leaky pipeline...

- A talent pipeline...
 - Education
 - Entry
 - Mid-career
 - Leadership
- Barriers and culture
 - “Jobs for the boys” & unconscious bias
 - Different roles
- We will not reach 50% of women in STEM in C21 (NCUB, 2017).



So what about pay?

Is the gender pay gap **different** in engineering & construction & technology?

- Are the issues different?
- What is the gender make up in each level of the work?

Are the **solutions** to the gender pay gap different in engineering & construction & technology?

- What about job conditions?
- Performance related pay?
- Bias and stereotypes?



The effect of STEM on overall GPG

“The STEM subjects (science, technology, engineering and maths) dominate the highest graduate earnings....”

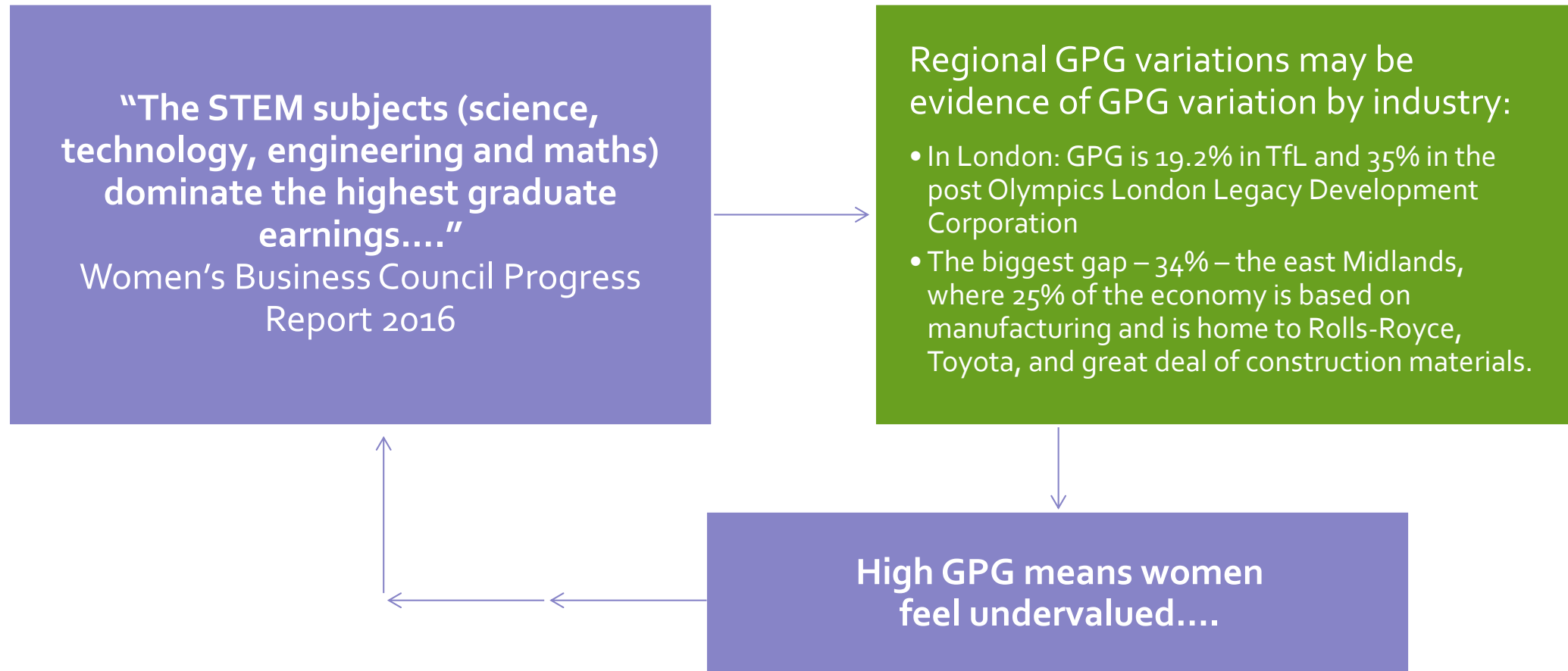
Women’s Business Council Progress Report 2016

Regional GPG variations may be evidence of GPG variation by industry:

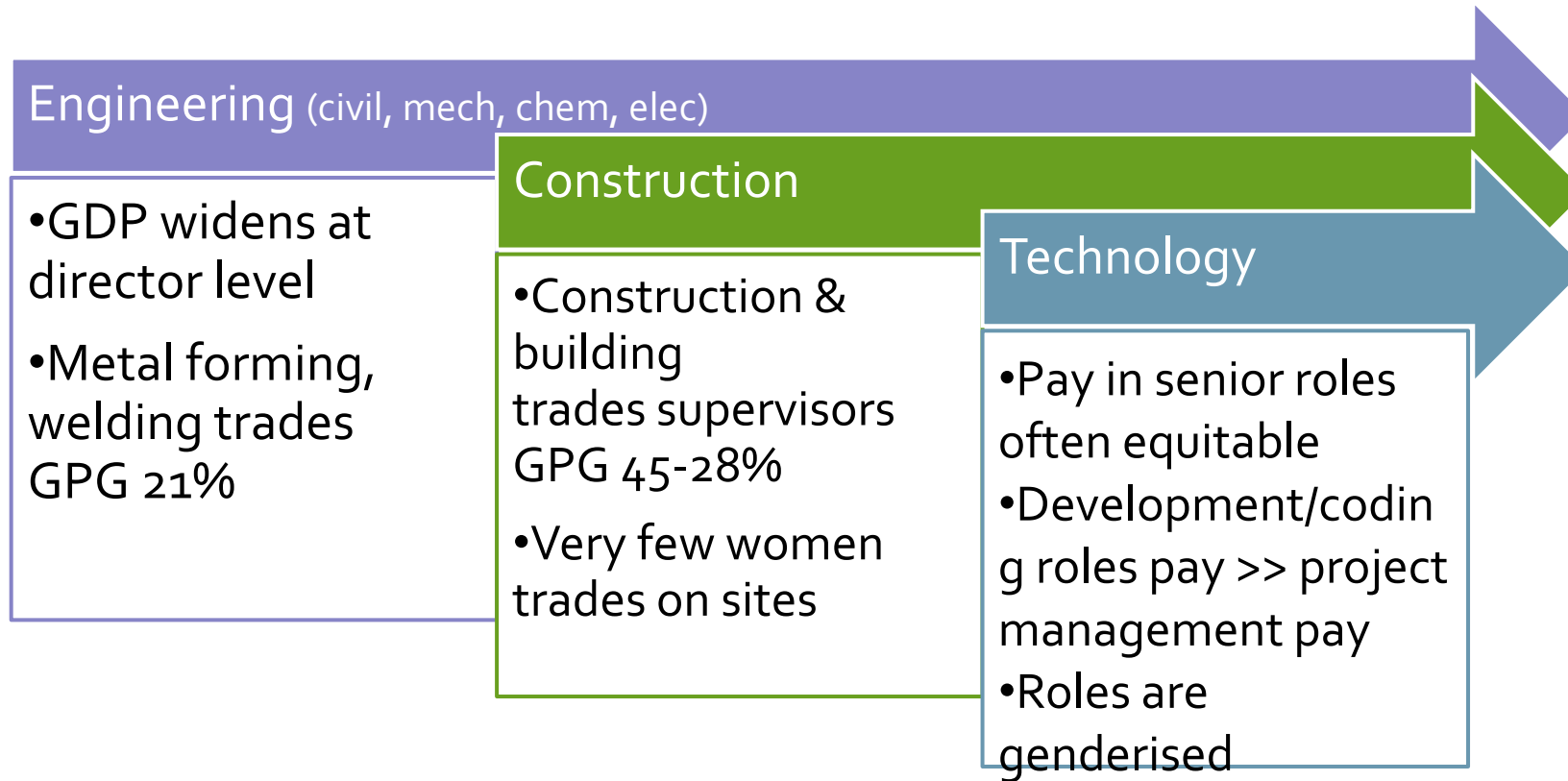
- In London: GPG is 19.2% in TfL and 35% in the post Olympics London Legacy Development Corporation
- The biggest gap – 34% – the east Midlands, where 25% of the economy is based on manufacturing and is home to Rolls-Royce, Toyota, and great deal of construction materials.



The effect of STEM on overall GPG



In engineering, construction and technology the GPG issues vary...



But it's changing, isn't it?

- One issue is **unconscious bias**...
 - 1,000 hiring managers reviewed the same CV. In organisations > 500 staff, recruiters 62% said it was extremely probable that they would interview "Simon", while 56% would interview "Susan"*
 - "John" is considered a more competent scientist than "Jennifer" with the same CV**
 - Leadership assessment: White male 15.4% vs. Black female 10%
- Then there is negotiation of salaries
 - Women negotiate less...
 - ...and are perceived to be more aggressive when they do
- Another is accumulated pay disparity...
 - Slightly lower pay at each stage + fewer promotions + career breaks

*Hays, Australia, 2014

**Moss-Racusin, 2013

Some results from 2018!



- More than 70 engineering-related companies in the UK pay men 35% or more on average compared to women*
- The gap is much larger when bonuses are included
- Where women are well represented at the top, the GPG shrinks
- Earlier reporters tended to report smaller GPGs**
- And 1/2 of the Times Top 50 Best Employers for Women reported gaps that are greater than the national average

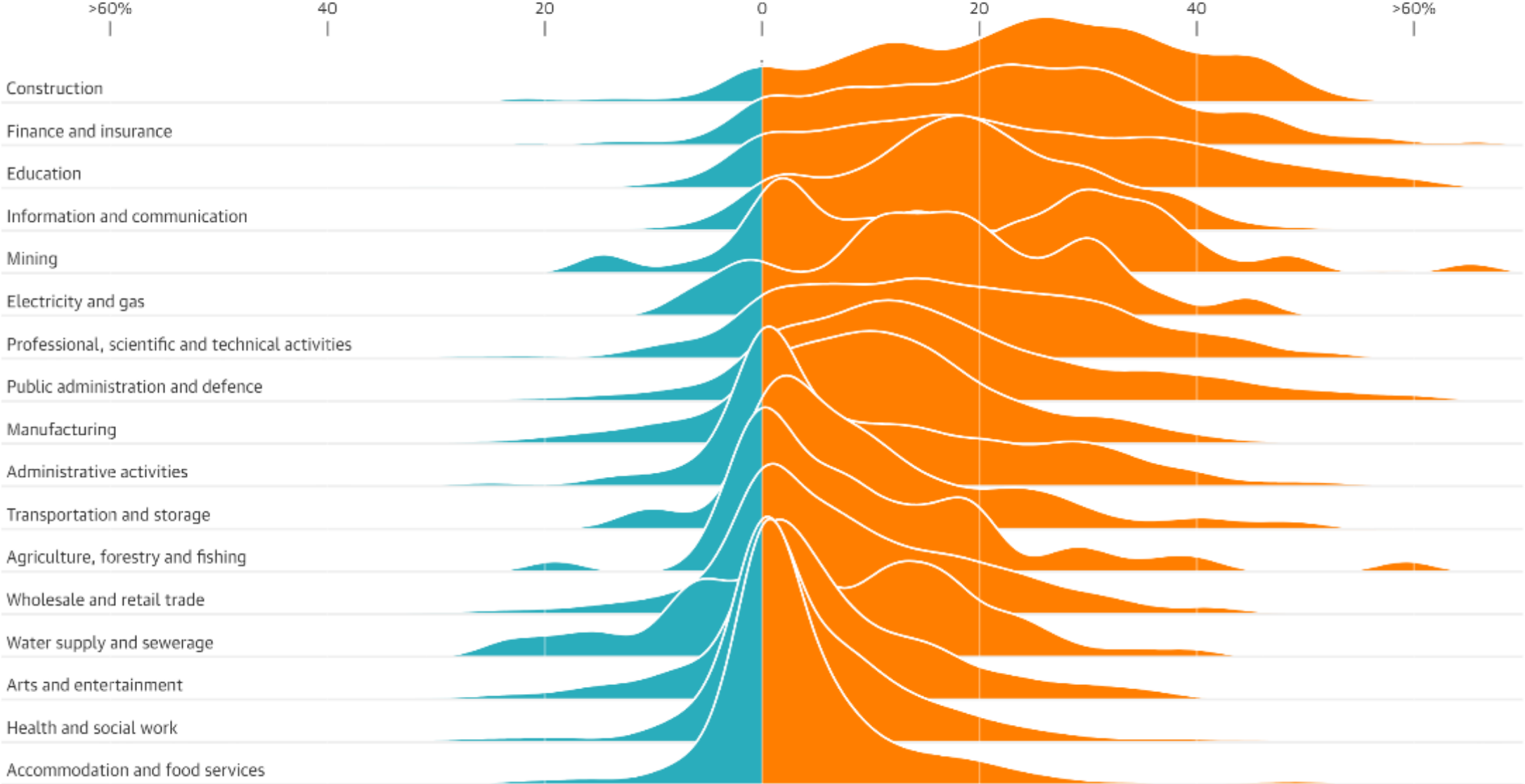
• IMechE, Professional Engineering, May 2018

**The Guardian, 28 March 2018

Women are more likely to be underpaid in certain sectors

Companies paying women more

Companies paying women less



But is the gender pay gap real?

Unequal pay?

John and Jane are doing the same job – but there is a difference in pay.

- Experience
- Bonuses and performance related pay

Or lack of women leaders?

- There are a lot of Johns in the senior team
- Or more Janes in non-leadership roles
- Maybe they have different roles!

And what if there is NO GPG reported?

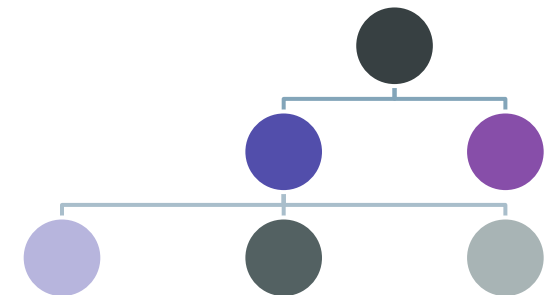
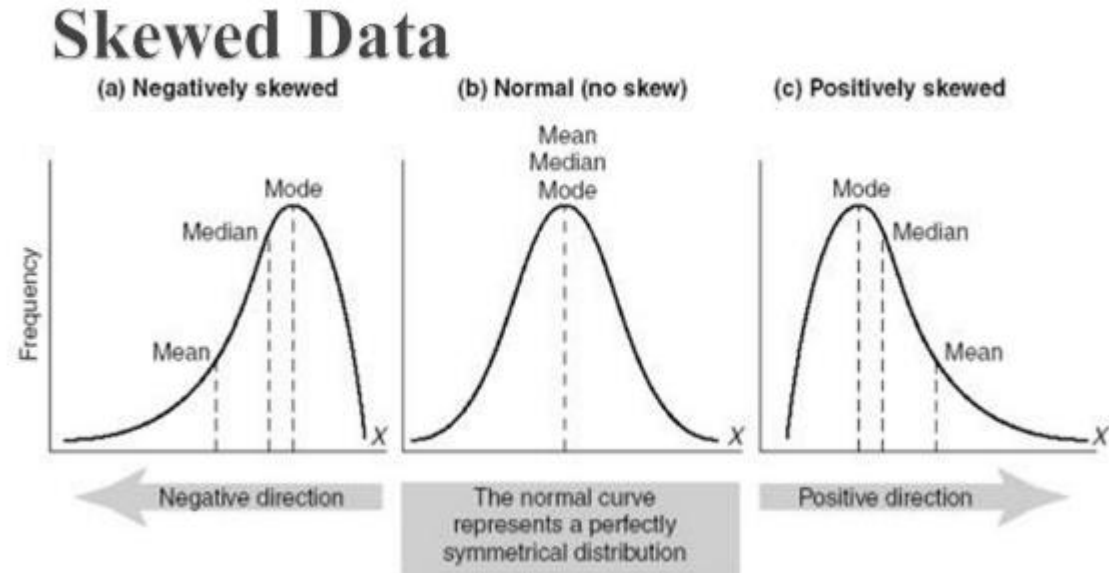
- Maybe there are more women in mid-level roles...
- ... and none in technician/craft roles?

A little statistics

- Mean versus median
- What does it all mean?
 - Means get skewed by extreme values
 - Median gets skewed by population size

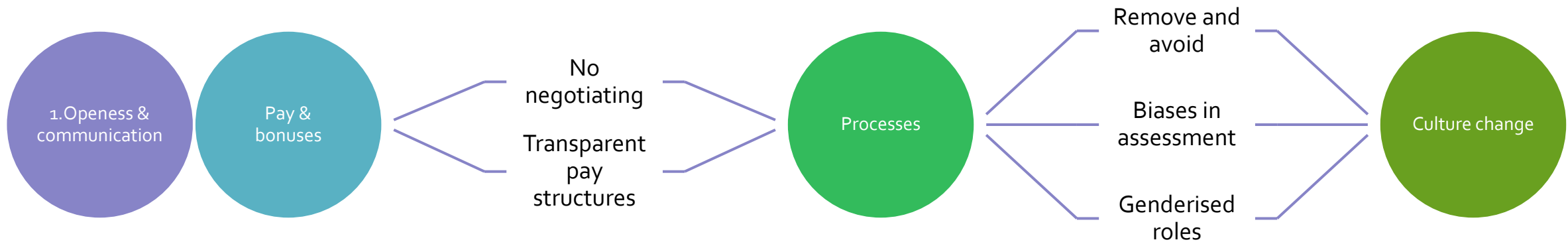
- **What if?**

- 10 women earning £20k
 - And 100 men earning £15k + 5 men earning £25k + 5 men earning £50k
- ⇒ Median: woman £20k, men £15k, i.e. +ve GPG median%
- ⇒ Mean: women £20k, men £17k, i.e. +ve GPG mean%



What needs to change?

- What seems to work



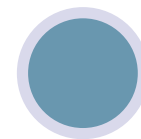
- Next steps in GPP reporting



1. By pay bands



By roles



By levels in each organisation

In the meantime...

- **Raising management and team awareness**
 - Communicating GPG issues
 - Training around biases and organisational barriers
- **Empowering networks**
 - Supporting individual negotiating
 - Salaries
 - Bonuses
 - Performance measures
 - Roles
 - Collective voices
 - With men-as-allies





Over to one of our partners...

Open Discussion

Any surprises in the reported results?

What do you think are the real reasons for the GPG in engineering & construction & technology?

Your views, experiences, research, data...

Open Discussion

What practical actions can employers take?

- At entry into the sector
- Recruitment points
- Reviews and promotion
- Bonuses & performance related pay
- Leadership

What should UK policy makers and government be doing?

- Is GPG reporting enough?
- Regulations
- Role of PEIs, sector skills councils, and other bodies...
- Public procurement
- The Industrial Strategy

Final thoughts...

It really matters...

What can we each do?

One action...

One pledge...





CENTENARY OBJECTIVES

100 YEARS OF THE WOMEN'S ENGINEERING SOCIETY

Past - Tell compelling stories from our past to shape our legacy.

Present - Celebrate our achievements, as a Society, as women engineers, as partners.

Future - Shape our future by leading transformation.



CENTENARY CHALLENGE

Set an inspiring vision for the future.



**30% BY
2030**

Let's identify the best **100for100**

Recognition of good practice

Knowledge share to support

Pledges to deliver the goal of **30by30**

Join us for 2019!



A centenary to
remember...

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