# A BEGINNER'S GUIDE TO DATA ANALYSIS

This is a supporting document for the Workforce Data Equality Guide which can be accessed here.

In the main guide we spoke about analysing trends, baselines, and benchmarks. If this language is unfamiliar to you, this document will demystify some of these terms. Make sure once you have collected this information you go to the Act section of the main guide to take action on the issues that the analysis identifies.

## Baselines

Once initial data has been collected against any data point, it becomes the organisation's baseline data. As the starting point against which future data will be compared to, these baselines will help you identify trends in the organization.

It will also help you evaluate the impact of any investments taken or interventions implemented to make the organisation more inclusive. In order to evaluate this, when planning any intervention, you should estimate how long it will take to see material changes in the data. It is essential to understand the timescales as often impact will not be immediate. For example if your intervention is to support recruitment of more young Black men to senior levels you should ensure you have collected the appropriate baseline data and your companies next round of recruitment might be an appropriate timescale for change.

If there is no change during this period, the data collection and analysis will still be useful in informing any decision about whether or not to continue with the intervention or if it needs refining. If, conversely, the data demonstrates success, it may support a resource-based conversation to drive greater impact.

## Trend information

Trend information is the story that emerges when you compare data over time, typically, year on year. If the information roughly shows the same numbers every year it suggests inactivity in an area or a programme that is not having impact. If after an internal drive to create a culture of trust results in more people self-declaring their personal information year on year, you have experienced a positive trend because of your intervention.

## Benchmarking

Benchmarking refers to the comparison of information. To benchmark your workforce monitoring data is to compare one set of data against another. In, addition to comparing data to the baseline, outlined above, data can be benchmarked in three ways.

Data can be benchmarked in comparison to:
1. Internal teams or departments to understand who is leading and who is a laggard
2. External benchmarking - Local or national demographic information
3. External benchmarking - Other organisations in your sector or nationally recognized benchmarks

Benchmarking is a useful tool for measuring progress and shows leadership and commitment from your organisation. Using comparative data to understand performance is key both for monitoring and communication purposes. It is also a very useful tool in engaging executives who will not want their organisation looking like a laggard.

### Internal Benchmarking

Internal comparisons can identify barriers to representation in specific roles and teams. For example, if some departments require regular international and overnight stays you may see greater discrepancies of representation among older workers and women as they are more likely to have caring responsibilities. Positive initiatives can also be identified through internal benchmarking, for example you may learn that a focus on virtual meetings has worked to decrease the travelling and increased diversity elsewhere in the business.

Additionally, it is useful to examine individual departments and teams, and highlight those that are lacking in diversity or have lower engagement scores or high cases of bullying and harassment in order to better target interventions and training. This will also aid managers in setting KPIs to improve. Finally, year on year, internal benchmarking can show progression and growth within an organisation.

### External Benchmarking

It is important to reflect the community around you and invest in local talent. Looking at local demographic data will support you in doing that. In the main guide many of the suggested questions will allow you to compare to census data to do this.

If you are a London-based business, you can use the London data store to understand the make-up of your London workforce against the city's data, as well as looking at local authority level to ensure you reflect the diversity of the location of your office. This will support you in setting targets that are evidence-based and will provide the business case to explain why your London targets are different from other geographies.

**The London datastore has developed this tool [LINK] to support employers to conduct external benchmarking on their data and set targets to build a workforce that reflects London's rich diversity.**

### Comparing against Best Practice

Whilst external research is still emerging there is some recognised thought leadership such as the Hampton Alexander review which focuses on Gender equality and advocates for 33% women on boards as a minimum target.

Understanding where you sit amongst best practice and sector peers is useful information. There is increasing pressure for greater transparency around workforce information which makes it possible to benchmark from publicly available information in companies' diversity reports.

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### Data sources to support benchmarking

London Data Store - A free and open data-sharing portal where anyone can access data relating to the capital.

Office for National Statistics – The ONS produce over 600 releases of UK economic social and population statistics a year. This is where you can find census information.

HR Data Hub – The HR data hub have freely available analyses of businesses Ethnicity and Gender pay gap broken down by sector

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## An example: Women in leadership

If after running your first ever diversity census you get the below information, this is your **baseline information.** Typically you would convert data to percentages for ease of analysis

### Year 1

| | Total Employees | Males | Females | Prefer not to say | Prefer to self-describe |
|---|---|---|---|---|---|
| **Total Employees** | **1000** | **506** | **481** | **5** | **0** |
| **Board** | **15** | 14 | 1 | 0 | 0 |
| **Manager** | **100** | 60 | 30 | 0 | 0 |
| **Junior** | **885** | 430 | 450 | 5 | 0 |

From this information you can see that whilst the organisation is attracting more women than men at junior level they are not progressing to manager or executive level at the same rate. *(Whilst not covered in this example, you should also notice no disclosures under the 'Prefer to self-describe' category and investigate this further.)*

Looking at **best practice** you know that the desired figure is a minimum of 33% of women on boards so to be there you would expect to see at least 5 females on your board. You also notice that the pool of female managers is a lot smaller than that of males.

At this point you may run a focus group where women who wish to progress speak about what they think the barriers are. Here you might discover a sentiment that certain managers are much less likely to promote women, in addition people of different ethnicities might raise concerns that there is a lack of role models for them at senior level.

To test this theory, you may wish to do some further analysis and **internal benchmarking** across teams to back up some assumptions

| Females by team | Total Female employees | Team 1 | Team 2 | Team 3 |
|---|---|---|---|---|
| **Total Female employees** | **30** | **155** | **171** | **155** |
| **Board** | 1 | 0 | 1 | 0 |
| **Manager** | 30 | 5 | 20 | 5 |
| **Junior** | 450 | 150 | 150 | 150 |

| Females by Ethnicity | Asian/ Asian British | Black/ African/ Caribbean/ Black British | Mixed/multiple ethnic groups | Other ethnic group (please state) | White | Prefer not to say |
|---|---|---|---|---|---|---|
| **Board** | 0 | 0 | 0 | 0 | 1 | 0 |
| **Manager** | 1 | 1 | 0 | 0 | 28 | 0 |
| **Junior** | 20 | 10 | 0 | 0 | 400 | 20 |

This information will allow you to see that whilst all have similar intakes of male/ female there is one team where progression is much more likely than others. In addition, the vast majority of senior women are white and a high proportion are not comfortable sharing this information,

With this information you may be ready to present it at Board level and to support your case you might want to show how your competitor is faring against you. They report their diversity data in the public domain so that you can do some **external benchmarking.**

| External benchmarking | Your organisation Women (% of the whole workforce) | Competitor 1 | Competitor 2 |
|---|---|---|---|
| **Board** | 0.1% | 5% | 5% |
| **Manager** | 3% | 15% | 20% |
| **Junior** | 45% | 50% | 52% |

Using this you can show your senior leaders that not only is your organisation behind it is also not attracting the same level of female talent, potentially due to how the organisation is viewed externally.

From this information the team may be able to invest in a specific leadership programme for high performing women and training for hiring managers of teams. They assign organisational gender targets and hold team leaders accountable to make these.

When carrying out a review of women in senior positions over the next two years the organisation sees the following **trends.**

## Year 2

As the programme is quite new you may not see any changes in the short term

| | Total Employees | Males | Females | Prefer not to say | Prefer to self-describe |
|---|---|---|---|---|---|
| **Total Employees** | **1000** | **488** | **496** | **3** | **3** |
| **Board** | **15** | 13 | 2 | 0 | 0 |
| **Manager** | **100** | 55 | 34 | 0 | 1 |
| **Junior** | **885** | 420 | 460 | 3 | 2 |

## Year 3

Slowly you will see the interventions start to take effect and you will notice that the wider efforts to become more inclusive are reflected not only in more women at leadership level but also in people's willingness to disclose their gender identity.

| | Total Employees | Males | Females | Prefer not to say | Prefer to self-describe |
|---|---|---|---|---|---|
| **Total Employees** | **1000** | **492** | **500** | **2** | **5** |
| **Board** | **15** | 12 | 3 | 0 | 0 |
| **Manager** | **100** | 60 | 38 | 0 | 2 |
| **Junior** | **885** | 420 | 460 | 2 | 3 |