



Diagnosis of Equal Remuneration [DER]

Self-use tool for measuring
gender pay gaps
in the organizations

INSTRUCTION MANUAL



UN Women, 2019

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The tools developed by the Women's Institute of Spain, available at www.iguldadenlaempresa.es, have been taken into account.

How to use this Manual

This INSTRUCTION MANUAL will allow you to learn how to use the **DER Tool**, and it is provided together with 2 Excel® files:

- ➔ **DER Tool UNWomen.xlsx**: this is the file you should work on.
- ➔ **Test DER Tool UNWomen.xlsx**: it is the same file, to which data and information of a fictitious company have been incorporated. This Model will allow you to better understand how the DER Tool works.

Save all three files on your computer. It is recommended that you print this INSTRUCTION MANUAL, because you will need to consult it very often.

This INSTRUCTION MANUAL is organized in 3 sections:

- ➔ **Introduction**: Provides basic concepts and directions for understanding the DER Tool.
- ➔ **Description of the DER Tool**: All the images shown in this section come from the **Test DER Tool UNWomen.xlsx**, so while consulting this section, you must at the same time have this file open on your computer, to be able to understand step by step the explanations provided.
- ➔ **Instructions**: Provide the necessary prompts for you to use the **DER Tool**. However, you should not do so before you have completed the above steps.

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Introduction

What is the DER Tool?

The **Diagnosis of Equal Remuneration [DER]** is a self-diagnosis tool for organizations that allows them to assess whether the principle of equal remuneration between male and female workers for work of equal value is being respected. It also identifies existing differences in remuneration, in line with ILO Convention 100 on equal remuneration¹.

What are the benefits of giving equal pay to women and men?

Having a remuneration system that respects gender equality will enable your organization:

- ➔ To remunerate staff according to the value they provide, also save time for those who manage the payment system and offer more efficient distribution of the salary burden among the different jobs.
- ➔ To increase the satisfaction and commitment of employees by remunerating them equitably.
- ➔ To improve the motivation of employees and increase awareness of the fact that their remuneration does not depend on sex.
- ➔ To attract and retain talent, especially among female employees.
- ➔ To increase the social reputation of the organization; its products and services.
- ➔ To improve labor relations and contribute to more effective collective bargaining by reducing the number of disputes and speeding up the resolution of disputes that arise.

Who can perform the DER

The Diagnosis of Equal Remuneration [DER] can be carried out by any organization, i.e. any private company, public entity, association, foundation, etc., which has a workforce.

Within the organization, the **people responsible for personnel management** (Human Resources Department or similar) will be responsible for carrying out the DER, providing the necessary information and analyzing the results.

What the DER provides

Once the **DER Tool** is done, the organization will get answers to the following questions:

- ➔ Are we respecting the principle of equal pay for women and men for work of equal value?
- ➔ What is the pay gap between women and men?
- ➔ Where do these differences occur and how much do they cost?
- ➔ What could the origin of these differences be?

¹ https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312245

Costs associated with carrying out the DER

The only cost associated with carrying out the **DER Tool** is that of the time dedicated by your staff. It is important to note that the **DER Tool** is the property of UN Women and its use is free of charge for companies and organizations wishing to use it. Therefore, its total or partial reproduction for commercial purposes that imply any type of payment or economic benefit to a third party, is prohibited.

DER Logic

The **DER Tool** is designed taking into account the "*principle of equal remuneration for men and women workers for work of equal value*" established by the C100 - Equal Remuneration Convention, 1951 (No. 100)². Therefore, the **DER Tool** compares the salaries of men and women for the same job, but also requires that the **value of each job** be established, to allow the comparison between different jobs with the same value.

What information is needed to be able to perform the DER

Updated information on each employee is required for a reference period, including personal information, job and salary. However, the **DER Tool** can work correctly without some of that information. Therefore, try to make the most of the information you have, since you may wish to include more information later.

What software and computer skills are needed

The **DER Tool** is a Microsoft Excel® file, in xlsx format, compatible with Microsoft Excel® 2010 and later versions. For effective and efficient use the data must first be included, and immediately and automatically analyzed in the form of tables and graphs that are easy to understand. Therefore, a working knowledge of this program is required. Although this INSTRUCTION MANUAL provides basic guidance, you can get more out of the **DER Tool** if you have specific knowledge of the Pivot Tables³.

The **DER Tool** can be modified at your convenience, to adjust it to the needs and particularities of your organization, under the [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International license](#).

What to do after getting the DER

The **DER Tool** provides a series of quantitative analyses of the compensation your organization is paying to staff. Once these analyses have been carried out, your organization may undertake one or more of the following actions:

- ➔ Establish and make public the remuneration system carried out with the **DER Tool**.
- ➔ Repeat the **DER Tool** annually, in order to monitor whether differences are reduced (if detected), or if new ones arise, and disseminate their results.
- ➔ Apply the latest remuneration for newly recruited staff, in line with the value contributed by each job, regardless of the gender of the person occupying the position.
- ➔ Correct salary discrimination as far as possible, increasing salaries where necessary.

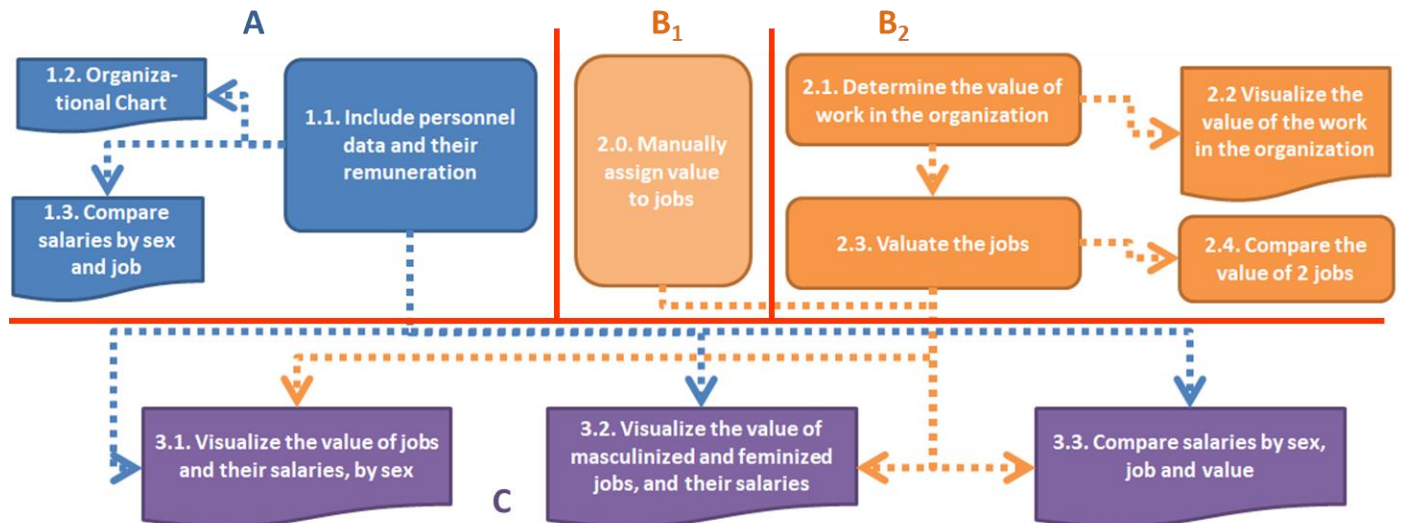
² https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_INSTRUMENT_ID:312245

³ For more information on Pivot Tables click [here](#)

DER Tool Description

Detailed DER Tool Logic

The **DER Tool** is a Microsoft Excel® Workbook, organized as follows:



The graph above shows, as a flowchart, the functions that the **DER Tool** can perform, which are as follows:

- A. Analyze salaries by sex and job.
- B. Value the jobs, for which you offer two options:
 1. In a direct way,
 2. By determining first the value of the work in the organization as a whole (measurement system), and then valuing each of the jobs.
- C. Analyze salaries by sex, job and value.

Each of these 3 functions is described in detail below:

A. Analysis of salaries by sex and job

According to the graph, the first thing is **1.1. Include personnel data and their remuneration**. This information is essential to start the **DER**; without it, nothing can be done. The information must be disaggregated by each employee. However, there are some information fields that are not mandatory. With this information, you can get a summary table of **1.2. Organizational Chart**, and also **1.3. Compare salaries by sex and job** for women and men, allowing you to already detect whether and where salary differentials exist.

B. Valuation of jobs

At this point, there is the option of completing the salary analysis considering not only the different jobs, but also their value. To do this, it is necessary to establish the value of these jobs, for which the **DER Tool** offers two options:

OPTION 1: **2.0. Manually assign value to jobs**. This option is eminently subjective and therefore not very rigorous. However, it is provided as an option for cases where your organization is not ready to perform an Objective Valuation of some or all of the jobs. The results obtained using this option will therefore suffer from the same lack of rigour.

OPTION 2: **Objectively assign value to jobs** for the entire organization, using an analytical method based on points and factors (recommended by the ILO as "*the most appropriate evaluation method for pay equity purposes*"⁴). This process is carried out in **three** consecutive **steps**:

- The first step entails **2.1. Determine the value of work in the organization**, which considers 4 FACTORS (A. QUALIFICATION, B. RESPONSIBILITY, C. EFFORT and D. WORK CONDITIONS). Each of these 4 FACTORS are then split into Sub-Factors, which must be selected, and their corresponding weights assigned. Once done, you will be able to **2.2 Visualize the value of the work in the organization** according to the weights assigned, allowing you to easily check if the result is in accordance with the reality of your organization and if it is not; see where to make the relevant adjustments.
- The second step, which is not included in the **DER Tool**, is to **have a description of all the jobs**, individually detailing their tasks and responsibilities, and the necessary requirements for the job.
- The third step comprises **2.3. Valueate the jobs** according to the descriptions, and to the valuation of the work already done in the first step. In order to do so, it is necessary to consider the jobs individually, determining which GRADE each of the Sub-Factors fall. This will result in each job receiving a point total. You can **2.4. Compare the value of 2 jobs** using the corresponding sheet.

C. Analysis of salaries by sex, job and value

Finally, by combining the **information on salaries** and the **job values**, it is possible to check whether the "*principle of equal remuneration for men and women workers for work of equal value*"⁵ is fulfilled in your organization. The **DER Tool** automatically performs several analyses that are provided. These analyses allow organizations:

- **3.1. To visualize the value of jobs and their salaries, by sex**
- **3.2. To visualize the value of masculinized and feminized jobs, and their salaries**
- **3.3. To compare salaries by sex, job and value**

⁴ "It is recommended that all steps in the job evaluation process be carried out with the active participation of workers and their trade union representatives. C100 - Equal Remuneration Convention, 1951 (No. 100)

⁵ Established by C100 - Equal Remuneration Convention, 1951 (No. 100)

Technical Description of the DER Tool

Each one of the "Boxes" in the diagram explained in the previous section corresponds to a sheet in the Microsoft Excel® Book, which are as follows:

Home	2.3.Jobs Value
1.1.Data	2.4.Compare Jobs
1.2.Chart	3.1.Salary Value
1.3.Salary Job	3.1.Salary Value (table)
1.3.Salary Job Graph	3.2.Salary Value Char
2.0.Manual Assign	3.2.Salary Value Char(table)
2.1.Factors	3.3.Salary Job Value
2.2.Factors Graphs	3.3.Salary Job Value Graph

Home

This sheet works as an Index of the **DER Tool**, presenting the general scheme of the same and allowing access to each sheet by simply clicking on the corresponding text box.

1.1.Data

In this sheet it is necessary to introduce the workers' data.

Data Scope

- **People:** This should include all the people who work in the organization. If the organization is structured in different units, autonomous and separated from each other (for example, the same company with different businesses, or different jobs in different locations, etc.), it may make sense to consider them separately, or to do the analysis only for one of those units.
- **Employment relationship:** In principle, this should include all the people who receive remuneration for working in the organization. This includes trainees and professionals working as external staff (with the cautions indicated below in relation to their salary), etc.
- **Date:** Data should be considered at a specific date (31 December, 30 June, or the date you want to consider). If a period is chosen, a time criterion must also be established (e.g. persons who were working from and until a certain date).

Mandatory nature of the data

- It is essential that the data be complete for the selected temporal and organizational scope.
- Some information fields are not compulsory (indicated by a "No" in the "**Comp.**" column of the table below), which means that if this information is not available, the **DER Tool** works the same way.

Data Normalization

For some fields, it is indicated (column "**Norm**" in the table below) that the data must be normalized, i.e. they must correspond to one of the values in a list. If not, the Tool will interpret that they are different data. For example, if in one row a job appears as "Mánager" (with an accent), and in another as "Manager" (without accent), the **DER Tool** will identify them as different jobs. These errors can be detected later, and corrected accordingly.

Table of Fields

FIELD	Description	Notes	Comp.	Norm
Id	Unique identifier	Used to avoid knowing the person's name	Yes	No
Sex	Sex of the person	Use "W" for women and "M" for men	Yes	Yes
Birth yr.	Year of birth	Indicate only the year, with 4 digits	No	No
Ethnicity/ race	The person's ethnicity/race	Use standardized designations	No	Yes
Children	No. of children of the worker	They are considered for the purposes of associated care work. Therefore, only children under a certain age can be considered.	No	No
Education	Education of the person	Level of education attained. A standard list should be established	No	Yes
Hire yr.	Year the person was hired	Indicate only the year, with 4 digits	No	No
Contract	Type of contract	Indicate the type of contract that exists with the worker	No	Yes
% working time	Percentage of working time performed by the person	100% means full time. This percentage is used to "harmonize" the salary	Yes	No
Area	Area in which you work	Instead of Areas, Work Centers, etc., can be considered	No	Yes
Department	Department in which you work	Organizational level immediately below the Area	No	Yes
Job	Job title	The tool admits a maximum of 40 different jobs (if there are more than 40 different jobs, it is recommended to group those that are similar, as long as this does not make possible gender differences invisible). There may be people with the same job in different departments.	Yes	Yes
Job Code	Job Code	Code representing a single job. The default syntax is: P01, P02, P03... It is recommended that you assign the first code to the highest level job. Each Job must have only one Job Code.	Yes	Yes
Level	Job Level	Level of responsibility of the job. There are usually several jobs on the same level. It is recommended to assign levels with 1 being the most important.	No	Yes
I. Fixed Sal.	Fixed Salary	(see below)	Yes	-
II. Sal. Additional	Additional Salary	(see below)	Yes	-
III. Sal. Variable	Variable Salary	(see below)	Yes	-
<i>Ibis.Adj.Fixed.Sal.</i>	<i>Fixed Salary Adjusted to 100% of the working time</i>	<i>IS CALCULATED AUTOMATICALLY, DO NOT INCLUDE DATA</i>	-	-
<i>IV.Adj.Total.Sal. (Ibis + II + III)</i>	<i>Adjusted Total Salary</i>	<i>IS CALCULATED AUTOMATICALLY, DO NOT INCLUDE DATA</i>	-	-
<i>Character</i>	<i>Masculinized or Feminized Character of the Job</i>	<i>IS CALCULATED AUTOMATICALLY, ACCORDING TO THE % OF WOMEN AND MEN IN THAT JOB</i>	-	-
<i>Points</i>	<i>Job Points</i>	<i>IS CALCULATED AUTOMATICALLY, DO NOT INCLUDE DATA</i>	-	-

Job

The variable "Job" is fundamental, for two reasons:

- This is the main variable that the **DER Tool** uses to do the analyses. All tables and graphs show that data.
- These jobs are the ones that have to be given a **value later**, in **sheet 2.3.Jobs Value** (or in **sheet 2.0.Manual Assign**).

Therefore, the following instructions must be taken into account in order to incorporate this information correctly:

➔ **Number of jobs:** One of the most critical questions is how many jobs will be considered. The tool, as indicated above, **supports a maximum of 40 different jobs**. The general recommendation is that they should be sufficient to faithfully reflect the reality of the organization. The following are some bad practices that should be avoided:

- Define as many jobs as people. If each person occupies a different job, there will obviously be no salary differences according to the job. To avoid this, a reasonable grouping exercise should be carried out, taking into account the similarity of functions and value of the job. For example, the same job may exist in different departments or locations, and it is in fact convenient to make these groupings. In addition, it will then be easier to assess those jobs, being less. You can opt for a minimum number and increase it according to the real need.
- Poor definition of jobs. This may be especially the case for more experienced staff. For example, if a person has been working in a receptionist job for some time now, it is common to add additional tasks and functions to those performed at the beginning (supervisory control, responsibility). For the purpose of determining your job, if necessary, a new job should be created for this person (e.g. "Senior Receptionist"). The principle to consider is that, if the value is different, the job must also be different.

This is a complex issue, and in fact the key is to find a reasonable balance. The advantage of the **DER Tool** is that information can be updated as adjustments are made, and the impact on analyses can be seen in real time.

➔ **Job title.** The same job must be named exactly and always in the same way. This is essential because Excel® only identifies as equal the values (texts) that are exactly the same (letter by letter). You must expressly avoid:

- Differences in letters/characters. The use of accents, capital letters, etc. should be unified and ensure that there are no "invisible" characters (spaces, underscore, etc.).
- Denomination in masculine or feminine. For example, if there is a job called "Salesman", in no case should "Salesman" be indicated for men, and "Saleswoman". Always choose a neutral denomination of the job: "Salesperson". This should be done even if there are jobs 100% occupied by men or women: use "Cleaning Personnel" and not "Maid", "Firefighter" and not "Fireman", etc. In addition, this neutral designation will further contribute to reducing the risk of gender bias in job evaluation.

➔ **True and fair view.** Since a comparison of salaries and jobs is to be made, it is essential to ensure that this information is always correctly "matched". Some cases of discordance, which should be avoided, are:

- Obsolete job information. Even if the person has worked for a long time in a certain job, it is possible that, in the information systems of the organization, it appears with a different job (for example, the first one he or she had in the company), or that by simplification of management, the information system does not reflect all the detail of the jobs. Even if your salary has been updated over time, if your job information has not been updated, your job information will be erroneous. It will therefore be necessary to ensure that the information is consistent.
- Recent job changes. If the person changed jobs in December, but from January to November has worked in another job, it will be important to take this into account to avoid potential errors in the calculations (for example, harmonizing the salary of the last month to the whole year, or considering only the months from January to November in the previous job. This would harmonize the total of the year if the analysis is being carried out for the entire 12 month period. Another option is to eliminate this data to avoid errors, although it is not an advisable alternative as it may make discrimination invisible).

Finally, it should be noted that the Job Code represents a single job. The default syntax is: P01, P02, P03... It is recommended that you assign the first code to the highest level job. Each Job must have only one Job Code.

Salary data

The salary data entered on this sheet must always be comparable. To this end, it must be ensured that the time lapse, used to compute salaries, is the same for all the people. The most common case is to consider a full year. Salaries will then correspond to that full year. If you are including people who have not been employed throughout the whole year, their salaries should be increased proportionately (for example, if a person has been employed for 6 months, and is going to be included in the **DER**, their salaries should be multiplied by 2). Shorter periods of time can be considered such as the month, quarter or semester.

In relation to the salaries to be incorporated, the following 3 categories are distinguished:

- ➔ **Fixed Salary** (I. Fixed Salary). A salary that a person receives on a stable or fixed basis. That is, every month (or pay period) is the same amount.
- ➔ **Additional Salary** (II. Additional Salary). This is the salary that a person receives on a temporary basis, associated with the performance of a longer period of work, or as additional compensation for an expense that he or she has had to incur. This amount varies from month (or pay period) to month.
- ➔ **Variable Salary** (III. Variable Salary). It is the salary that a person receives in recognition for their performance or for the overall results of the company or organization. These amounts are normally paid at the end of the year or semester.

With this information, the Tool automatically performs the following calculations:

- ➔ **Ibis.Adj.Fixed.Sal.** (I / % working time). The Fixed Salary is divided by the % (percentage) of working time consigned for the person. For example, if a person has a Fixed Salary of 15,000 per year, working 50% of the working day, then this calculation will result in 30,000 per year (allowing you to compare your salary with that of people who work 100% of the working day).
- ➔ **IV.Adj.Total.Sal.** (Ibis + II + III). This Adjusted Total Salary is obtained by adding the Adjusted Fixed Salary, the Additional Salary, and the Variable Salary.

In all cases they should be counted as a salary:

- ➔ Both cash salaries and **salaries in kind** (according to their objective economic valuation),
- ➔ The amounts corresponding to **taxes and social insurance**, whether these are payable to the worker or to the competent public authorities or their representatives.

Salary Concepts

A table of Salary Concepts and the Salary category in which they should be computed is provided below:

SALARY CONCEPT	Fixed Salary	Additional Salary	Variable Salary	DO NOT COMPUTE
Ordinary salary - basic salary	x			
Job supplements	x			
Personal allowances	x			
Seniority allowances				x
Sales Commissions		x		
Recurring salary bonuses		x		
Overtime		x		
Compensated holidays		x		
Occasional salary bonuses			x	
Profit sharing			x	
Reimbursement of expenses				x
Fuel payment				x
Cell phone				x
Transport	x			
Social / health insurance	x			
Retirement plans / funds	x			

Non-compulsory fields, “catch-all” fields

In the "Field Table" there are a number of fields that are not compulsory. They're the following:

- Year of birth
- Ethnicity/race
- Children
- Education
- Hire yr.
- Contract
- Area
- Department

Non-compulsory means that, even if not included, the Tool continues to function correctly. Therefore, if this information is included, the result is that the analyses can be fine-tuned in more detail, through the application of filters (see below how to **Filter the results by segmentation of data**, in [sheet 1.3](#)).

But there is another interesting consequence: the organization can use these fields as "catch-all fields", i.e., use these fields (columns of [sheet 1.1.Data](#)) to include different information that is of interest to the

organization, taking advantage of a field (column) for which it has no information, or for which it is not relevant.

For example:

- If it is relevant to consider the years of experience in the job, you can use the field "Hire yr.", even with a different format (it is not necessary to have 4 digits).
- If a company needs to discriminate not only by Area and Department, but also by location of the workplace (regions, different countries), it can use the variable "Education".

Please note that the Area and Department fields, although not mandatory, are used to prepare the **1.2.Organizational Chart** (see next point).

1.2.Chart

After selecting in the "Data" menu the option "Update all" (see the

Instructions at the end of this Manual), the tool automatically provides a pivot table as an Organization Chart of the organization, organized by **Areas and Departments**. It also includes the level of responsibility of each job, and the number of men and women in it. It is useful to have an overview of the staff whose data have been included in **sheet 1.1**.

Organizational Chart					M	W
1.ADMINISTRATION	1.1.Management	N1	P01	General Dir.	1	
		N4	P07	Administrative		2
	1.2.Accounting	N2	P03	Boss	1	
		N3	P06	Technician	1	1
2.COMMERCIAL	2.1.Sales	N4	P07	Administrative	1	2
		N2	P02	Director	1	
		N3	P04	Salesperson	5	3
		P06	Technician		1	
	2.2.CallCenter	N4	P07	Administrative		2
		N2	P03	Boss		1
		N4	P07	Administrative	1	
		P09	Teleoperator	2	5	
3.PRODUCTION	3.1.Warehouse	N2	P03	Boss	1	
		N4	P08	Worker	7	1
	3.2.Manufacturing	N2	P02	Director	1	
		N3	P05	Engineer	3	1
		P06	Technician	1	2	
		N4	P07	Administrative	1	2
		P08	Worker	10	4	

1.3.Salary_Job

After selecting the "Update all" option from the "Data" menu (see

Instructions at the end of this Manual), the tool automatically provides a pivot table sorted by levels and jobs, which shows in the right-hand columns the salary differences (in %) by job and for the total of the organization. Note that salary data is shown as averages, calculated from the data in **sheet 1.1**.

Children

0 1

2 3

4 5

6

Education

(en blanco)

Hire yr.

1988	1996	1998	2000	2001
2002	2004	2005	2006	2007
2008	2009	2010	2011	2012
2013	2014	2015	2016	2017

Contract

External

Perman...

Tempor...

Area

1.ADMINISTRATION

2.COMMERCIAL

3.PRODUCTION

Department

1.1.Management	1.2.Accounting
2.1.Sales	2.2.CallCenter
3.1.Warehouse	3.2.Manufacturing

Ethnicity/ race

African descent	Asian
Caucasian	Indigenous/N...
Mestizo	Mulatto

Sex											% of difference between women & men				
Level	Job	Character	N. of people		Ibis.Adj.Fixed.Sal.	II. Sal. Additional		III. Sal. Variable		IV.Adj.Total.Sal. (Ibis)	Adj.Fixed.Sal.	Sal.Additio	Sal.Variabl	Adj.Total.Sal.	
			M	W		M	W	M	W		Sal.	nal	e	al.	
N1	P01	General Dir.	[Not applicable]	1	3.500	1.040		1.200		5.740					
N2	P02	Director	[Not applicable]	2	2.900	365		1.146		4.411					
N2	P03	Boss	[Not applicable]	2	3.028	2.480	522	423	228	643	3.778	3.546	22%	23%	
N3	P04	Salesperson	(Masculinized)	5	2.207	2.230	0	0	729	414	2.935	2.644	-1%	76%	
N3	P05	Engineer	[Not applicable]	3	2.173	2.280	527	456	349	490	3.049	3.226	-5%	16%	
N3	P06	Technician	(Feminized)	2	2.080	1.970	146	213	142	228	2.368	2.411	6%	-32%	
N4	P07	Administrative	(Feminized)	3	1.093	1.060	103	114	61	36	1.257	1.210	3%	-10%	
N4	P08	Worker	(Masculinized)	17	1.027	1.014	98	89	0	0	1.125	1.103	1%	9%	
N4	P09	Teleoperator	(Feminized)	2	840	822	100	10	0	0	940	832	2%	900%	
TOTAL				37	27	1.608	1.370	185	116	246	132	2.039	1.619	17%	59%




The pivot table indicates the character of the job: Feminized (the % of women in that job is above 60%), Balanced (between 60% and 40%) or Masculinized (less than 40%). If there are less than 5 persons in the job, [Not applicable] shall be indicated.

Salary differences are calculated using the following formula:

$$\text{Salary Difference} = \frac{\text{Men's Salary} - \text{Women's Salary}}{\text{Men's Salary}}$$

In this sheet it is possible to **Filter the results by data segmentation**, using the coloured "boxes" that appear at the top of the pivot table, each of them referring to one of the segmentations. To do this, you must select which values you want to appear in the table below, clicking on them in the "boxes" at the top.

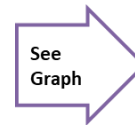
To select more than one in the same "box", hold down the "CTRL" key and click on as many as you want. The tool allows you to combine filters with each other, using several "boxes" simultaneously. If you want to stop using a filter, click on the  icon that corresponds to each "box".

Interpretation

In the right-hand column, values shaded **red** (differences > 0%) mean that women earn less than men and values shaded **green** (differences < 0%) that women earn more. The more intense the color, the greater the difference.

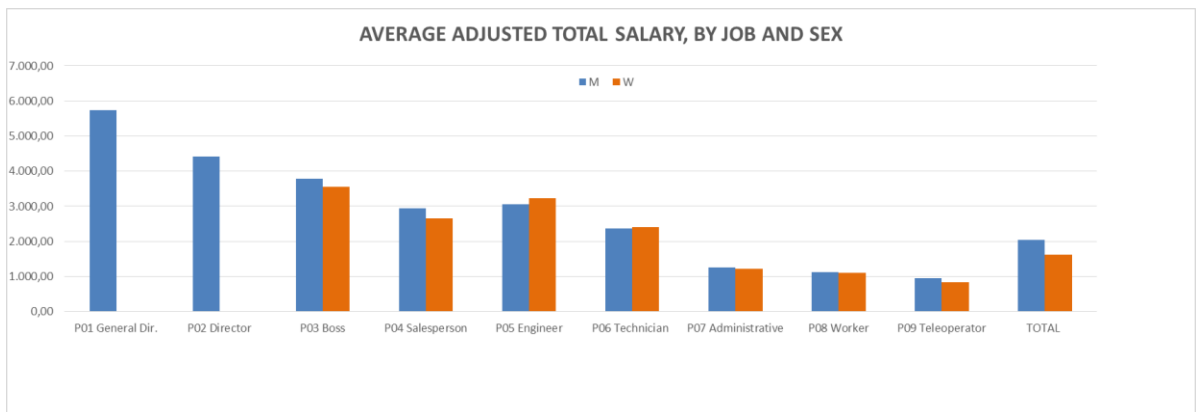
The use of filters is recommended to deepen the analysis.

You can graphically display the results of this table on [sheet 1.3](#).



Two bar graphs are shown on this sheet:

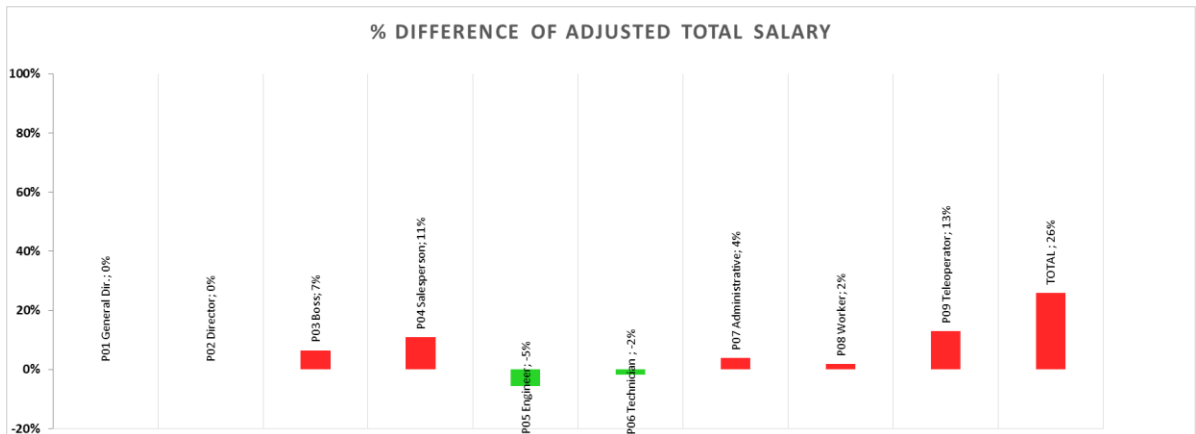
- **AVERAGE ADJUSTED TOTAL SALARY, BY JOB AND SEX**, where the values are compared, and the differences can be observed in absolute terms.



Interpretation

For the same job, height differences show salary differences

- DIFFERENCE OF ADJUSTED TOTAL SALARY, which shows these differences by job (always considering averages), in relative terms, i.e. in percentages.



Interpretation

Red indicates that the difference is negative for women, and **green** indicates the opposite situation (women receive a higher average salary).

Note that it is very likely that the greatest percentage difference occurs when considering the company as a whole (in the image of the example, 26%), and yet this difference is not found in any of the jobs considered individually. The explanation is that the pay gap comes mostly from vertical segregation (lower proportion of women in better paid jobs, higher proportion in lower paid jobs). The salary differentials associated with vertical segregation do not mean salary discrimination, but rather unequal access to leadership positions.

2.0.Manual_Assign

This table presents the jobs (up to a maximum of 40) that have been included in the **Data sheet**, with its Job Code (note that each job has its own code), and its corresponding Level. In the lower row (MANUALLY ASSIGNED POINTS) there is the possibility of directly giving value to the job, including a number of points, considering a maximum of 1,000 points. If left empty, the DER Tool will take into consideration the points resulting from the objective assessment of jobs. If it is completed for any of the jobs, this entered value will be taken as a preference, even if that same job has an objective valuation later on.

Level	N1	N2	N2	N3	N3	N3	N4	N4	N4
Job Code	P01	P02	P03	P04	P05	P06	P07	P08	P09
Job	General Dir.	Director	Boss	Salesperson	Engineer	Technician	Administrative	Worker	Teleoperator
MANUALLY ASSIGNED POINTS	900		775						

2.1. Factors

As indicated, this sheet provides the first step to **objectively assign value to jobs** using a Point and Factor Method.

In particular, it is a question of **2.1. Determine the value of work in the organization**, establishing a list of FACTORS, which in turn are broken down into Sub-Factors, and assigning weight to establish the system for measuring the value of work in the organization. At this stage the assessment must be made for the organization as a whole. The following 4 steps must be followed:

- 1. Distribute the weight among the 4 FACTORS (cells B4 to E4):** A. QUALIFICATION, B. RESPONSIBILITY, C. EFFORT and D. WORKING CONDITIONS. They must add up to 100% (otherwise, the total cell on the right will not show green). The distribution provided by default is within that recommended by the ILO⁶, but may change according to the reality of your organization.

DEFINITION OF THE FACTORS USED, ACCORDING TO THE ILO PUBLICATION "PROMOTION OF EQUAL PAY THROUGH GENDER-NEUTRAL JOB EVALUATION: A DETAILED GUIDE".

- Qualifications.** "Designate the knowledge and skills required for a given job, which can be acquired in a variety of ways: academic or vocational training accredited by a diploma; paid experience in the labor market; non-institutionalized training; voluntary experience."
- Responsibility.** "It refers to tasks that have an impact on the company's objectives, such as its profitability, its financial soundness, the breadth of its markets, and the safety and health of its customers."
- Effort.** "Designates the difficulty, fatigue and tension involved in the execution of tasks."
- Working conditions.** "Designate the environmental conditions and the psychological climate in which the work is performed."

2. Assign relevance to each Sub-Factor (cells F9 to Z9). For each FACTOR, a set of default⁷ Sub-Factors are provided. These Sub-Factors must allow the comparison of the different jobs in the organization and must therefore cover the characteristics of all of them. Although the choice of Sub-Factors and their number will have to be adjusted to each organization, the tool presents an indicative list. In this sense, you must:

- Decide if each Sub-Factor is RELEVANT for the organization. If this is not the case, a value of 0 (zero) must be assigned. Doing so, the corresponding texts will appear in **grey**.
- If necessary, within the same FACTOR, replace a Sub-Factor that is not relevant with another that is relevant to the organization. You can do this by typing it directly over the cell you want to replace.
- Assign relevance to each Sub-Factor, giving it a score between 0 (zero) and 10 (ten). Note that this note is relative within the FACTOR. Thus, if 40% is assigned within FACTOR B. RESPONSIBILITY, what is being determined is how that 40% is distributed, so if there are 4 Sub-Factors, and the four with a grade of 7, then each one would receive 10% of the total.

⁶ See chapter 7, pages 70 and 71 of PROMOTING EQUITY: GENDER-NEUTRAL JOB EVALUATION FOR EQUAL PAY. A STEP-BY-STEP GUIDE, ILO, 2009. https://www.ilo.org/declaration/principles/eliminationofdiscrimination/WCMS_122372/lang--en/index.htm

⁷ You can consult an example of definition of Sub-factors in: Berrocal Berrocal, Francisca. 2016. Annex 2.1. Scoring method. Definition of factors and levels. In *DOCTORAL TESIS: Comparative analysis of three methods of job evaluation*. Madrid. <https://eprints.ucm.es/38833/1/T37653.pdf#page=349>

LIST AND DEFINITIONS OF PROPOSED SUB-FACTORS

Important Note: There is no fixed or mandatory list of Sub-Factors. Those provided below and in the MODEL file are for illustrative purposes only. Each organization must decide how many and which ones to use, so that they allow the characterization of all their jobs.

FACTOR	Sub-Factor	Definition
A. QUALIFICATIONS	Technical knowledge	Minimum knowledge (not considered in the Formal education) that a person must have in order to correctly carry out the functions of the job.
	Formal education	It indicates the minimum level of conventional education that a person must have in order to satisfactorily carry out the functions of the job.
	Previous experience	Indicates previous experience required to perform the job satisfactorily.
	Teamwork	Level required by the job to work in a team (coordinated work of two or more people to achieve a common goal).
	Client Orientation	Permanent attitude to detect and satisfy the needs and priorities of the clients.
	Team management	Ability to guide the action of a work team and guide it towards the achievement of shared objectives.
	Languages	Indicates the minimum knowledge of languages that a person must have in order to satisfactorily perform the functions of the job.
	IT knowledge	Indicates the level of computer skills required for the proper performance of the job.

FACTOR	Sub-Factor	Definition
B. RESPONSIBILITY	Commitment	Intellectual and emotional involvement with the company that the job requires.
	Initiative	Level of proactivity (setting the course through concrete actions, ability to imagine, undertake, develop and evaluate approaches, actions) required by the job.
	Leadership	Ability to set objectives and priorities. Ability to motivate and inspire the team to ensure long-term competitiveness and effectiveness.
	Planning and Control	This factor measures the responsibility to organize or direct the work of other workers who are hierarchically dependent on the occupier, so as to have the best possible overall performance from those who depend directly, or where appropriate, indirectly, on him/her.
	Independence	Level of autonomy that the occupant of the job has to carry out the activities included in the job.
	Financial impact	Type of financial responsibility that the occupant of the job has. The degree of responsibility will be considered.

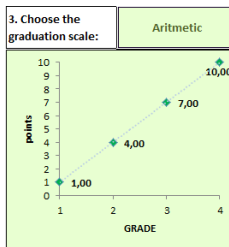
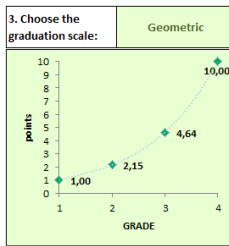
C. EFFORT	Mental effort: technical difficulty / precision	Level of precision and accuracy necessary to achieve the specifications required in the various executions and productions derived from the job.
	Physical effort (weight, posture, etc.)	Level of physical effort to be developed by the occupant of the job to perform effectively. Consideration will be given to uncomfortable positions, frequent movements and handling of heavy objects.
	Emotional effort	Specific emotional demands, which are regulated by a set of organizational rules on how the employee should behave in his/her interaction with the client/user.
	Use of computer equipment	Frequency and complexity of use of computer equipment and display screens.
D. WORKING CONDITIONS	Adverse physical environment	Jobs may include progressive degrees of exposure to varying intensities of unavoidable physical and environmental factors, which increase the risk of accident, illness or physical discomfort. Examples of these activities include: toxic or unpleasant fumes, extreme temperatures, high noise, vibrations, dirt, dust, and unavoidable exposure to hazardous substances, equipment and/or situations.
	Adverse psychological conditions	Stress, interaction with clients, emotional involvement.
	Trips and displacements	Frequency, duration and hardship of the trips and displacements associated with the work job.

- 3. Define the names of the GRADES for each Sub-Factor (cells F10 to Z13).** These GRADES will always and necessarily range between one (1) and four (4): grade 1, the lowest, that of null value for the Sub-Factor considered ("Not required", "Does not have", "Never"), and the highest, grade 4, that of maximum value ("High", "Permanent"...). The names of the GRADES can be defined to better fit with each Sub-Factor.

For example, in the MODEL, for the Sub-Factors "Formal education" and "Physical effort (weight, posture, etc.)" the following 4 GRADES have been considered:

FACTOR	A. QUALIFICATIONS	C. EFFORT
Subfactor Code	A02	C02
Subfactor	Formal education	Physical effort (weight, posture, etc.)
2. Assign relevance to each Sub-Factor (from 0 to 10)	7	6
1	Not required	Never
2	Basic	Occasional
3	Specific Core	Frequent
4	Specific Technical	Permanent

4. Choose the graduation scale of the Sub-Factors (cell C8). 2 options are provided:



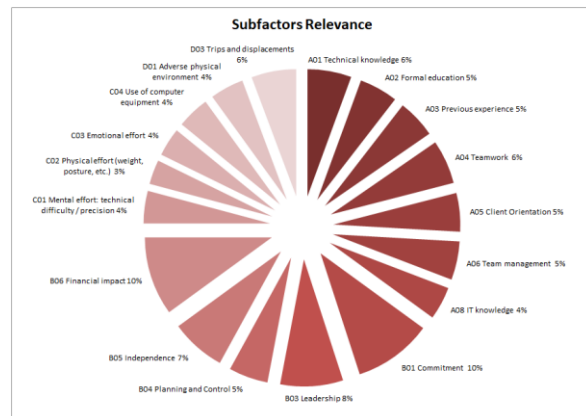
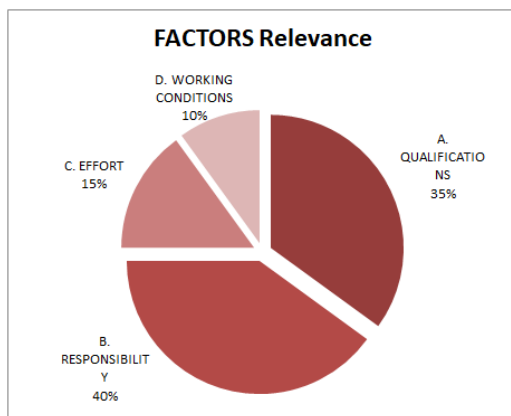
a. **Geometric scale:** The quotient between a value and the previous one is always the same. This means assigning points in an increasing way, rewarding the higher levels, understanding that the complexity or increasing intensity must be rewarded in a constant proportion in relation to the next lower level.

b. **Arithmetic scale:** The difference between a value and the previous one is always the same. This means assigning points linearly.

Note that in both cases the scores are always 4; starting with 1 and ending with 10. This means that the grades that are set for each Sub-Factor are always 4; starting with GRADE 1 and ending with GRADE 4. For example: if you are evaluating the job of Teleoperator, for the Sub-Factor "Trips and displacements", the corresponding grade is GRADE 1, which in this case means "Never", since for this job it is never required to travel or displace.

2.2.Factors_Graphs

These two automatic graphs allow you to **2.2 Visualize the value of the work in the organization** according to the weightings given to FACTORS and Sub-Factors in the previous sheet, allowing you to easily check if the result is in accordance with the reality of your organization and, if not, to see where to make the pertinent adjustments.



2.3.Jobs_Value

Valuate the jobs according to the description of each position (the job's descriptions must be ready before this process), after 2.1. Determine the value of work in the organization in sheet 2.1.

In order to do so, it is necessary to consider the jobs one by one, determining which GRADE of each Sub-Factors is necessary for that job. To do this, a drop-down list is provided in each cell, with the existing GRADES for that FACTOR (there are always 4).

2.3 JOBS VALUATION		N1	N2	N2	N3	N3	N3	N4	N4	N4
Level		P01	P02	P03	P04	P05	P06	P07	P08	P09
Job Code		General Dir.	Director	Boss	Salesperson	Engineer	Technician	Administrative	Worker	Teleoperator
Job										
A01	Technical knowledge	High	High	High	Medium	High	High	Medium	Basic	Not required
A02	Formal education	Specific Technical	Specific Technical	Specific Technical	Specific Core	Specific Technical	Specific Technical	Specific Core	Specific Core	Not required
A03	Previous experience	High	Medium	Medium	Medium	High	Medium	Medium	Basic	Not required
A04	Teamwork	High	SELECT GRADE	High	Not required	Medium	Basic	Not required	Medium	Not required
A05	Client Orientation	High	High	High	High	Basic	Basic	Medium	Not required	High
A06	Team management	High	High	High	Not required	Medium	Medium	Not required	Not required	Not required
A07	Languages	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
A08	IT knowledge	Medium	Medium	Medium	Medium	High	Medium	High	Not required	Medium
B01	Commitment	High	High	High	High	Medium	Medium	Basic	Basic	Basic
B02	Leadership	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required	Not required
B03	Planning and Control	High	High	High	Not required	Medium	Medium	Not required	Not required	Not required
B04	Independence	High	High	High	Medium	Medium	Medium	Medium	Basic	Basic
B05	Financial Impact	High	Medium	Medium	High	Medium	Medium	Basic	Not required	Not required
B06	Mental effort: technical difficulty / precision	High	High	Medium	High	Medium	Medium	Basic	Basic	Medium
C01	Physical effort (weight, posture, etc.)	Permanent	Frequent	Frequent	Frequent	Permanent	Permanent	Occasional	Occasional	Occasional
C02	Emotional effort	Never	Never	Never	Never	Occasional	Occasional	Never	Permanent	Never
C03	Use of computer equipment	Frequent	Frequent	Frequent	Occasional	Occasional	Occasional	Occasional	Occasional	Frequent
C04	Adverse physical environment	Occasional	Occasional	Occasional	Occasional	Permanent	Permanent	Permanent	Never	Permanent
D01	Adverse psychological conditions	Occasional	Occasional	Occasional	Never	Occasional	Occasional	Never	Permanent	Never
D02	Trips and displacements	Never	Never	Never	Never	Never	Never	Never	Never	Never
D03	Trips and displacements	Occasional	Occasional	Occasional	Frequent	Never	Never	Never	Never	Never
CALCULATED POINTS		830	770	690	531	553	490	307	255	268
MANUALLY ASSIGNED POINTS		900	0	775	0	0	0	0	0	0
CONSIDERED POINTS		900	770	775	531	553	490	307	255	268

For example, for the job "Comercial" you select the relevant grade of each of the Sub-Factors considered relevant for the organization. In the image, for the Sub-Factor "Technical knowledge", the grade "Medium" has been selected.

2.3 JOBS VALUATION		Level	N3
Job Code		P04	
Job		Salesperson	En
A01	Technical knowledge	Medium	
A02	Formal education	Not required	
A03	Previous experience	Basic	
A04	Teamwork	Medium	
A05	Client Orientation	High	
A06	Team management	Not required	
A07	Languages	Not required	
A08	IT knowledge	High	

And so on until you indicate the GRADE of all the relevant Sub-Factors (those that are not, are shown in gray lettering).

2.3 JOBS VALUATION		Level	N3
		Job Code	P04
		Job	Salesperson
A01	Technical knowledge		Medium
A02	Formal education		Specific Core
A03	Previous experience		Medium
A04	Teamwork		Not required
A05	Client Orientation		High
A06	Team management		Not required
A07	Languages		Not required
A08	IT knowledge		Medium
B01	Commitment		High
B02	Initiative		Not required
B03	Leadership		Not required
B04	Planning and Control		Medium
B05	Independence		High
B06	Financial impact		High
C01	Mental effort: technical difficulty / precision		Frequent
C02	Physical effort (weight, posture, etc.)		Never
C03	Emotional effort		Frequent
C04	Use of computer equipment		Occasional
D01	Adverse physical environment		Never
D02	Adverse psychological conditions		Never
D03	Trips and displacements		Frequent
CALCULATED POINTS			531

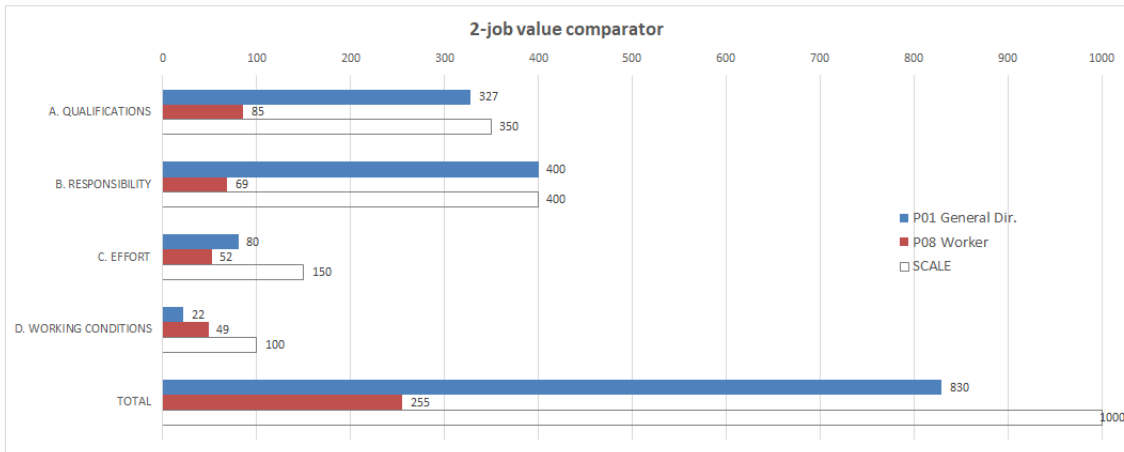
As a result, **each job will have a total of points**, which are shown in the row CALCULATED POINTS. These points can be a maximum of 1,000, although this figure will be impossible to reach, as it would mean that that job would have the highest grade for all Sub-Factors. If the points of any of these jobs have been manually indicated in [sheet 2.0.Manual_Job_Value](#), as indicated and shown in the row MANUALLY ASSIGNED POINTS, these points will prevail over the one calculated here. The points considered for the following analyses are indicated in the row CONSIDERED POINTS.

2.4.Compare_Jobs

This Sheet allows you to **2.4.Compare the value of two jobs**, and it is intended to be a visual aid to refine the valuation, if necessary.

To do this, in the cells at the top left you must select the two jobs you want to compare. The results are shown in the table on the right and in the graph below.

Home	(click to choose job)	A. QUALIFICATIONS	B. RESPONSIBILITY	C. EFFORT	D. WORKING CONDITIONS	TOTAL
Job A	P01 General Dir.	327	400	80	22	830
Job B	P08 Worker	85	69	52	49	255
	SCALE	350	400	150	100	1000



3.1. Salary Value

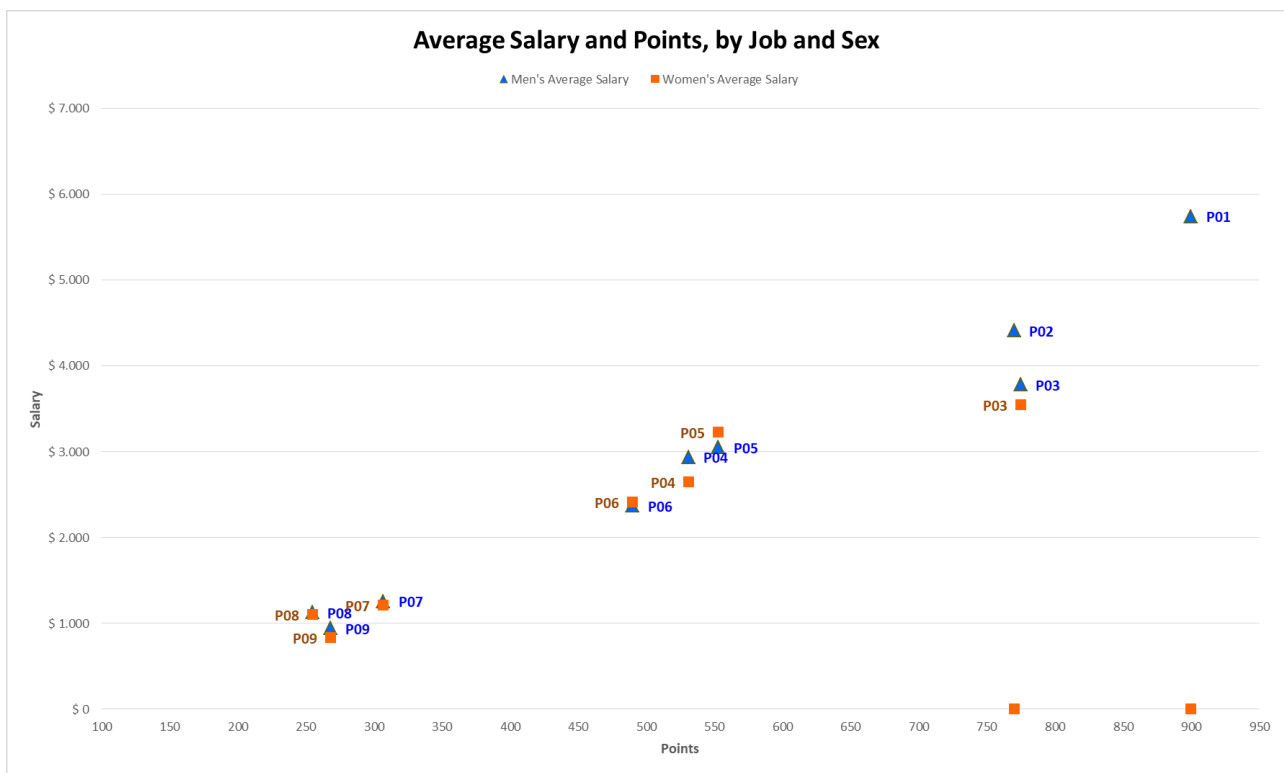
This Sheet allows you to **3.1. Visualize the value of the jobs and their salaries, by sex** in a graph in which each point is represented by sex and job:

- ➔ On the vertical axis, the average Adjusted Total Salary (IV.Adjusted Total Salary).
- ➔ On the horizontal axis, the value of the job.
- ➔ On the label, the Job Code.

This graph allows you to compare salaries by jobs according to their value, in addition to detecting differences that may exist, by sex, within the same job.



At the top right of the arrow, you can access the table of data that originates this graph.



Interpretation

The graph should draw a rising trend line (imaginary, not drawn), from left to right, as a sign that the higher the value, the higher the salary. If it is detected that the line stops going up, or even down, it means that this principle is not being respected.

The line should also not have "peaks" or pronounced steps, that would mean that those jobs are receiving more pay without really bringing so much extra value.

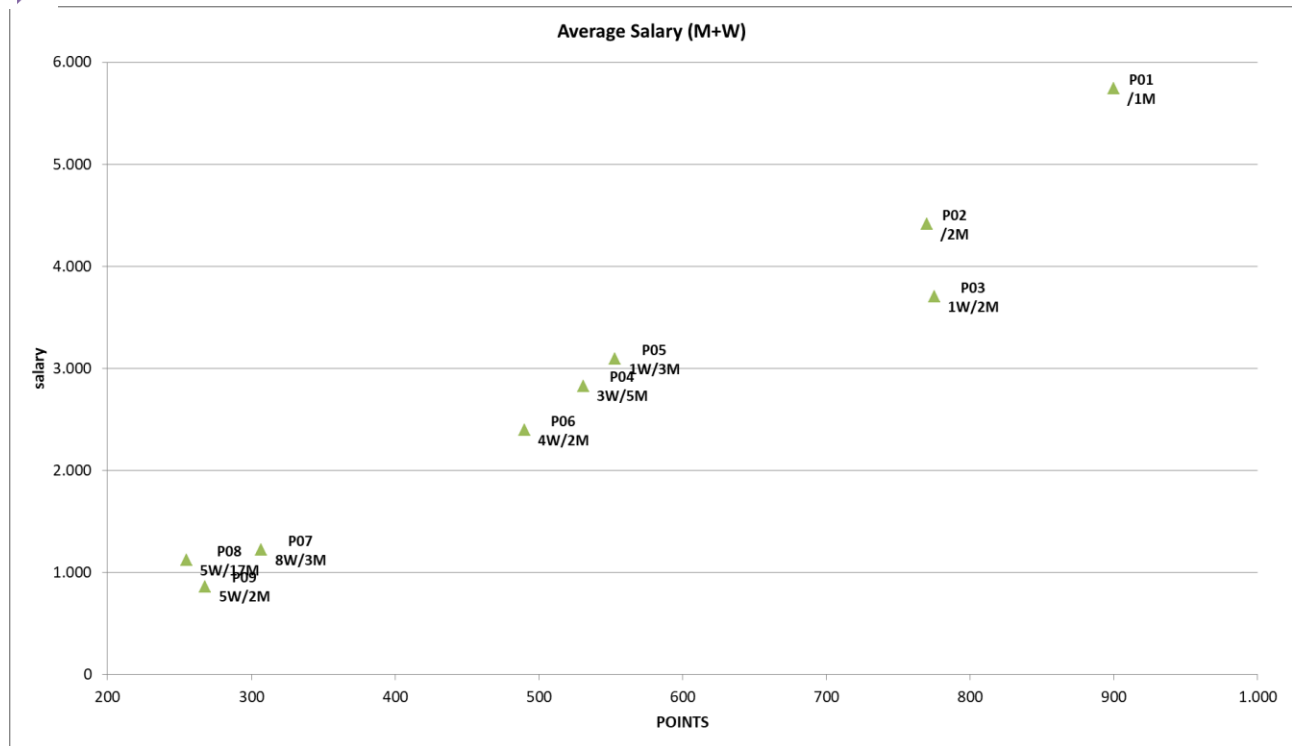
In relation to the orange (Women) and blue (Men) points, the existing differences should be observed, both for the same job and for different but close jobs (similar value).

3.2. Salary Value Chart

This Sheet allows you to **3.2. Visualize the value of the masculinized and feminized jobs and their salaries** in a graph in which each point is represented by job:

- ➔ On the vertical axis, the average Adjusted Total Salary (IV.Adjusted Total Salary).
- ➔ On the horizontal axis, the value of the job.
- ➔ On the label, the Job Code and the number of women and the number of men occupying it.

At the top right of the arrow, you can access the table of data that originates this graph.



Interpretation

This graphic allows you to detect differences that may exist between jobs. In general, the line formed by the dots should be continuous and ascending. The "bumps" that can be detected in that line can imply an inequality in salary.

3.3. Salary Job Value

This Sheet allows you to **3.3. Compare the salaries by sex, job and value** in a pivot table similar to the one offered in **sheet 1.3.Salary-Job**, already explained, but adding the job valuation information.

Children 0 1 2 3 4 5 6	Education (en blanco)	Hire yr. 1988 1996 1998 2000 2001 2002 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	Contract External Perman... Tempor...	Area 1.ADMINISTRACION 2.COMMERCIAL 3.PRODUCTION	Department 1.1.Management 1.2.Accounting 2.1.Sales 2.2.CallCenter 3.1.Warehouse 3.2.Manufacturing	Ethnicity/ race African descent Asian Caucasian Indigenous/N... Mestizo Mulatto
---	---------------------------------	---	---	---	---	---

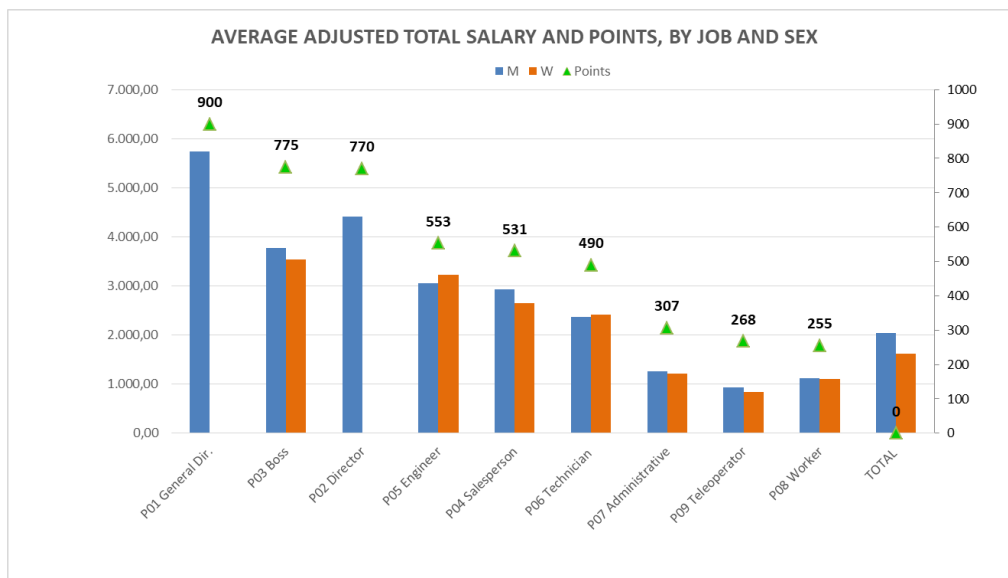
Level	N	P	Job	N. of people		Ibis.Adj.Fixed.Sal.		II. Sal. Additional		III. Sal. Variable		IV.Adj.Total.Sal.		% of difference between women & men					
				M	W	M	W	M	W	M	W	M	W	Adj.Fixed.Sal.	Sal.Additio.nal	Sal.Variable	Adj.Total.Sal.		
N1	900		General Dir.	1		3.500		1.040		1.200		5.740							
N2	775		Boss	2	1	3.028	2.480	522	423	228	643	3.778	3.546	22%	23%	-65%	7%		
N2	770		Director	2		2.900		365		1.146		4.411							
N3	553	1	Engineer	3	1	2.173	2.280	527	456	349	490	3.049	3.226	-5%	16%	-29%	-5%		
N3	531	3	Salesperson	5	3	2.207	2.230	0	0	729	414	2.935	2.644	-1%		76%	11%		
N3	490	4	Technician	2	4	2.080	1.970	146	213	142	228	2.368	2.411	6%	-32%	-38%	-2%		
N4	307	8	Administrative	3	8	1.093	1.060	103	114	61	36	1.257	1.210	3%	-10%	67%	4%		
N4	268	5	Teleoperator	2	5	840	822	100	10	0	0	940	832	2%	900%		13%		
N4	255	5	Worker	17	5	1.027	1.014	98	89	0	0	1.125	1.103	1%	9%		2%		
TOTAL				37	27	1.608	1.370	185	116	246	132	2.039	1.619	17%	59%	86%	26%		

Interpretation

In the right-hand column, values shaded in **red** (differences > 0%) means that women earn less than men and shaded in **blue** (differences < 0%) indicates that women earn more. The more intense the color, the greater the difference. The use of filters is recommended to deepen the analysis.

You can graphically display the results of this table on **3.3. Graph Salary Job Value**, using the button

This sheet shows a graph of AVERAGE ADJUSTED TOTAL SALARY AND POINTS, BY JOB AND SEX:



Interpretation

There must be a correlation between the job points (triangles in **green**), and the average salaries (bars). As explained in previous graphs, it allows users to observe:

- Salary differences between women and men for the same job.
- Salary differences between jobs of similar value.
- The Degree of correlation between points and salary.

Instructions

Print and read this INSTRUCTION MANUAL in its entirety, while viewing the file **Test DER Tool UNWomen.xlsx**, in order to understand exactly how the **DER Tool** works.

Only then do the following steps:

1. Get the data from your own staff.
2. Download the **DER Tool** to your computer.
3. Open the file.
4. Go to **sheet 1.1. Data**. Paste your staff data from cell B3, using the "Paste Special" option, "Paste Values".
5. Press CTRL + Alt + F5, or click on the "Refresh all" icon in the "Analyze" menu (see [here](#)). At this point you can already **1.3. Compare salaries by sex and job**.
6. Go to **sheet 2.1.Factors**, and follow the instructions. Then, go to **sheet 2.3.Job Value** and follow the instructions.
7. If you need **2.0. Manually assign value to jobs** for one or more jobs, go to **sheet 2.0.Manual Assign** and follow the instructions.
8. Press CTRL + Alt + F5 again, or click " Refresh all ". At this point you will have the complete **DER**.
9. Save the file with a new name.
10. View all **DER Tool** sheets. If you wish, you can print the file using the option "Print Entire Workbook".