

NETHERLANDS

# SALARY GUIDE 2023

The definite source of salary information  
for the data market in the Netherlands



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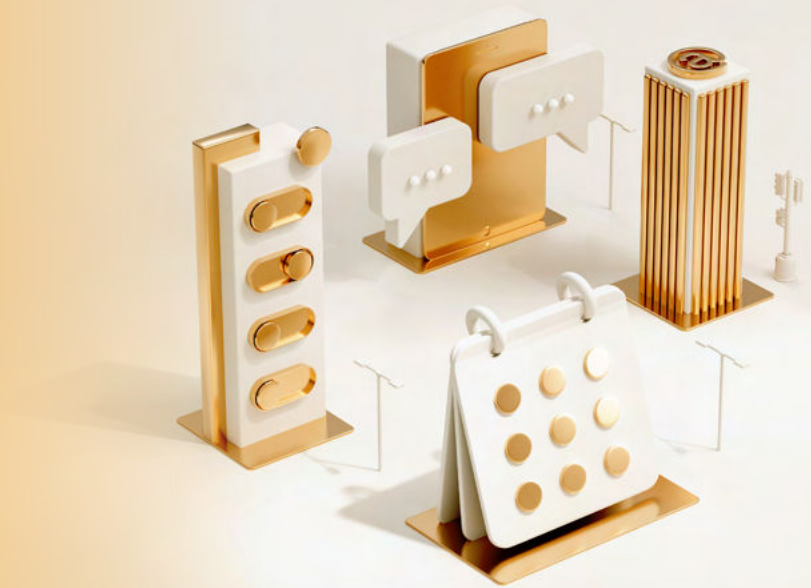
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## Welcome to the 12th annual data salary guide, presented by **Harnham and Rockborne.**

Using data from a global survey of thousands of data professionals, this guide provides an in-depth overview of the data landscape across the Netherlands.

Inside, you'll find an overview of average salaries, an analysis of the latest hiring, workplace, and technological trends, as well as expert commentary on how we can continue to drive progress in the world of data, artificial intelligence (AI), and machine learning (ML).



# SALARY GUIDE INTRODUCTION

## A WORD FROM HARNHAM'S CEO

### **It is my pleasure to introduce you to our annual salary guide for the Netherlands.**

I want to thank every respondent who took the time to take part in our survey. Your responses have provided invaluable insights and, alongside an analysis of our placements and roles over the past year and a review of job boards worldwide, have offered a clear view of the industry in 2023.

This year's survey paints a picture of resilience to the economic storms of the previous year, with hiring levels beginning to stabilise. The data market, as always, owes its success to the forward-thinkers and innovators that make up our exciting, evolving industry, and it is this which will future-proof its continued progression.

Our findings are reflective of the global trend of salaries returning to less inflated levels, with many businesses forced to be more conservative with their hiring strategies and financial incentives. That said, the average change in pay has seen an increase of 8% as businesses clearly try to grapple with rises in inflation.

As employees and employers face rises in the cost of living, there is need of a balancing act between expectation and reality to ensure that businesses balance profits with remaining competitive when it comes to attracting the best talent.

In the post-pandemic landscape, remote and hybrid work remain a consistent theme, with candidates consistently rating the option to work remotely as the most desirable benefit.

However, more and more businesses and candidates recognise the business value of attending an office and are embracing a hybrid working arrangement. Only a small number of candidates have shown an inclination to work fully remote and many are reporting a desire to return to the office environment.

The economic challenges of the past year are evidently impacting employee priorities, with receiving a bonus being rated as the second most important benefit after remote working. This represents a shift from last year, with bonuses becoming more valued than flexible working hours, as workers feel the pinch.

# SALARY GUIDE INTRODUCTION

## A WORD FROM HARNHAM'S CEO

When it comes to gender diversity, we're glad to see the moves that many companies are making towards equality are slowly paying off. This year we found that 24% of data professionals are women. However, we hope that we can play a part in helping the industry to take the strides that we know it is capable of in this area. This is something that we will examine in more detail in our '2023 Diversity In Data Report', due to launch later this year.

I hope you find this year's guide useful and informative. As ever, if you have any feedback, suggestions, or questions about the guide, then please email [research@harnham.com](mailto:research@harnham.com).

**- Dave Farmer / CEO of Harnham**



ABOUT

**DAVE FARMER**

**As one of the founding partners of Harnham, Dave has become a recognised figure in data recruitment over the past 17 years.**

Having helped hundreds of data professionals develop their careers, Dave is now leading and growing Harnham's presence throughout the UK, Europe, and US.

# ABOUT THIS GUIDE

## For our 2023 Salary Guide, we have compiled data from:

- | An independent survey with more than 165,000 data points collected from over 6,500 data professionals globally.
  - | Analysis of all placements and vacancies by Harnham's Netherlands branch over the last 12 months.
  - | Data from roles recruited by Harnham's Netherlands branch.
  - | Analysis of data roles advertised online.
- \* Please note that in some instances throughout the guide, percentages do not add up to 100% due to rounding.

## Salaries for each role have been broken down by experience level and respondents were asked to match themselves against one of the following:

- | Entry Level (Starting out their data career in an entry-level role, perhaps having achieved their first promotion).\*
- | Mid-Level (Experienced hands-on position, remaining in a technical capacity and possibly leading projects).
- | Technical Lead/Manager Level (Within a role that has moved from technical work and into a management position, or having a senior technical hands-on position).
- | Head of / Director Level (Leading business units comprising of one or more technical teams within one vertical/specialism).

\* some rates are not included for contract roles, due to the seniority of the position or experience required.

# ABOUT THE ANALYSIS

**The analysis for this report was done by a team of Rockborne data consultants led by Mohammed Dougramaji, Rachel Nunn, and Sean Smart. Rockborne's CEO, Waseem Ali, discusses the process for this:**

Harnham's most recent salary survey of the industry received over 6,500 responses from data professionals across 34 countries across the UK, US and Canada, and Europe.

To produce effective and valuable insights from these responses, the data required cleaning, enhancement, and exploration across Excel, Power BI, and Python. Standardisation is a key outcome of data cleaning, by identifying and removing outlier values and setting upper and lower limits for data distributions, we can create a more informative view of the data. As an example, upper and lower bounds were implemented on salary in each region, as values may be unreasonably low (for instance if someone put a monthly as opposed to yearly salary) or unreasonably high (possible if someone accidentally added an extra zero when answering).

For the purposes of this study, data outside of 'male' and 'female' gender classifications were not considered due to the sparse number of responses, although we hope this changes in the coming years. However, data exploring representation of non-binary and gender fluid persons in the industry will be analysed in Harnham's '2023 Diversity In Data Report', report due out later this year, as we recognise that this is an important area of discussion and should not be overlooked. As part of expanding the utility of the salary guide, Harnham is developing an online salary checker, allowing users to compare their salary across levels of seniority as well as geographic location.

Salary checker available at:

[harnham.com/data-ai-analytics-salary-guides-2023](https://harnham.com/data-ai-analytics-salary-guides-2023)

**- Waseem Ali / CEO of Rockborne**



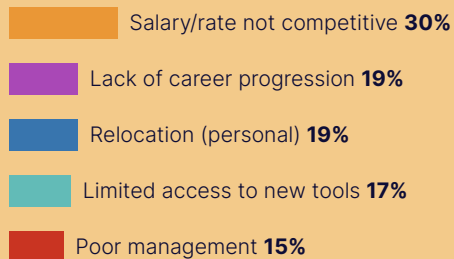
## ABOUT ROCKBORNE

Rockborne's mission is to diversify the data space. They tackle this in two ways; by connecting companies to diverse, Rockborne trained data consultants. And by providing data training to organisations that are looking to upskill their existing teams. Learn more at [rockborne.com](https://rockborne.com)

# INDUSTRY

## KEY FINDINGS

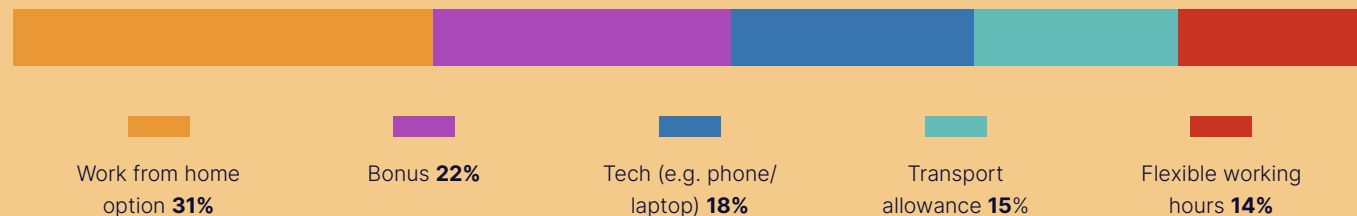
### TOP FIVE REASONS FOR LEAVING A ROLE



### TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN NDL DATA & ANALYTICS MARKET

1. Python
2. SQL
3. Microsoft Azure
4. Tableau
5. Excel

### TOP FIVE MOST DESIRABLE BENEFITS





# INDUSTRY

## KEY FINDINGS

63%

### FEEL AS OR MORE SECURE

In their role than in 2022

63%

### WOULD LEAVE THEIR ROLE

If the right opportunity came up

24%

### AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year

24%

### AVERAGE BONUS RECEIVED

With 21% receiving a smaller bonus than the previous year

10%

### RECEIVED A COUNTEROFFER

Of these 21% accepted the offer

8%

### AVERAGE CHANGE IN PAY FROM 2022

24%

### NUMBER OF FEMALE PROFESSIONALS

3 YEARS

### AVERAGE LENGTH OF TIME IN A ROLE

# REMOTE & HYBRID WORKING

**Similar to last year, the majority of businesses are continuing to operate on a hybrid basis, with just 4% of companies in the Netherlands returning to the office full-time post-COVID.** The usual requirement is to be in the office between one and three days per week, although those in more technical roles frequently come to the office just one or two days each week, on average.

This arrangement suits most professionals, given that three quarters state that they prefer the hybrid working set up. Across all specialisms, professionals list the option to work from home as the most desirable benefit in their job and, when applying for a new role, candidates expect to spend some of their time working from home. Ideally this is combined with some flexibility around hours, although this benefit often falls behind other 'desirable' benefits, such as bonuses, work tech and transport allowances.

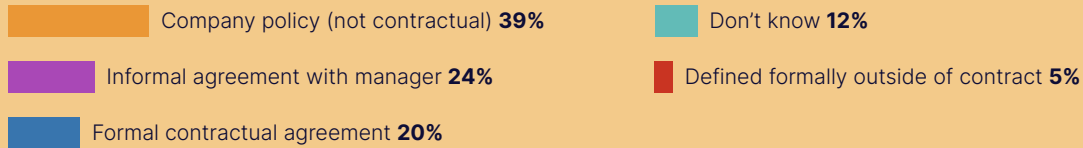
There is no realistic prospect of a return to old working habits and businesses are increasingly looking to formalise these new hybrid and remote working agreements in their employment contracts, with 20% of respondents now having an official agreement in place.

Whilst hybrid is generally preferred, 15% of candidates profess to favouring a fully remote set up.

# REMOTE & HYBRID

## KEY FINDINGS

### HOW HYBRID OR REMOTE WORKING AGREEMENT IS DEFINED IN EMPLOYMENT CONTRACTS



### AVERAGE NUMBER OF DAYS SPENT IN THE OFFICE PER WEEK



# REMOTE & HYBRID

## KEY FINDINGS

75%

PREFER HYBRID WORKING

24%

WORK FULLY REMOTELY

15%

PREFER TO WORK FULLY REMOTELY

20%

HAVE FORMALISED HYBRID/REMOTE WORKING IN CONTRACT

1-2 DAYS

MOST FREQUENTLY REQUIRED NUMBER OF DAYS IN OFFICE

4%

RESPONDENTS COMPANIES HAVE RETURNED TO OFFICE FULL-TIME POST COVID

# AI AND EMERGING TECHNOLOGY

**Artificial intelligence (AI) is of course continuing to make a splash in the data market, generating new roles and influencing the skillsets most in demand.** For example, we are witnessing an increased need for candidates who have been working in areas of conversational NLP or prompt engineering. Development in areas such as generative AI both within language and image/video data, are also stimulating the creation of new jobs and larger capabilities within established and emerging data teams.

Across Harnham's clients, we are seeing signs that some are beginning to utilise elements of AI. For example, in computer vision where companies are looking to generate new images across the medical field, security, and creativity, the emergence of generative AI has been huge. In machine learning (ML) we are seeing product-based generative AI roles emerge, rather than strictly research & development (R&D).

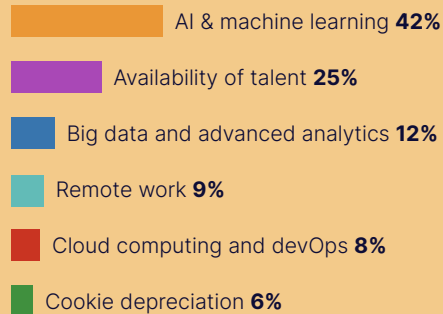
Data privacy and automation are also likely to become hugely impactful on the market. Having ethically sourced data that does not infringe on privacy laws will become a huge priority over

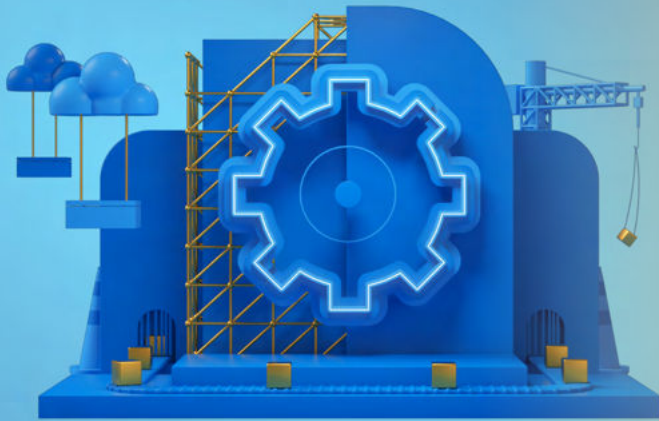
the next couple of years as legislation catches up to market trends. Companies will grow and emerge strictly around privacy laws and data protection. Automation is also on the rise, with a boom in the MLOps and ML field as a whole. Companies that automate most effectively and have a commitment to data where scale is at the forefront of a data team, rather than ROI, have been the most successful.

What makes data & AI so exciting is that it is constantly evolving. With a revolving door of new technologies emerging, what is trending today won't be the same in a year's time. The companies that can adapt the fastest, most successfully, and scale reasonably, are likely to reap the greatest benefits.

# AI AND EMERGING TECHNOLOGY

## WHICH WILL HAVE THE BIGGEST IMPACT ON DATA & AI IN 2023?





# DATA & TECH ROLES

NETHERLANDS



# DATA & TECH ROLES

## NETHERLANDS

**Salary expectations piqued last year due to exceptionally high demand for skilled data & technology professionals in the Netherlands.** Now that markets are experiencing more

challenging economic conditions, these salaries appear to have plateaued with employers needing to rationalise spending. This is reflected in the average pay change of only 5% compared with 2022, representing the lowest in the industry.

Professionals are generally feeling secure in their roles but 84% would leave their job if the right opportunity came up. This willingness to move is a reflection of the historically high demand for these skills. By having the upper hand, candidates have become accustomed to the significant pay increase a move often involves, making them open to new opportunities.

There are signs of shifts towards greater specialisation within the field, for example the roles of data platform engineers, analytics engineers and data engineers have already become more defined. With key data processing firms leading the way down this route, it is likely that the industry will follow suit.

### WHAT WE'RE SEEING IN THE DATA & TECH MARKET

In a hybrid working world that is here to stay, hiring managers are looking for data and technology professionals who can work independently without support, to complement this set up. A significant number of organisations are looking to hire Dutch-speaking candidates, who are in short supply. Due to the high level of demand for this skillset, these candidates are tending towards contracting work, moving from firm to firm.

When exploring new roles, professionals expect hybrid and remote working from home to be part of the package as standard. For more technical roles, the norm is to come to the office for one or two days per week.

In terms of technologies, Microsoft Azure is likely to remain dominant in the Netherlands over the coming months, following the release of new tools to meet market needs.



**ROSS HENDERSON**

Director,  
Netherlands



# DATA & TECH ROLES

## NETHERLANDS

### FOCUS ON DATA ENGINEERING

Organisations are finding qualified data engineers the hardest candidates to recruit for, and by some margin. Consequently, businesses that have managed to secure the talent they need are trying hard to retain these professionals and, as a result, data engineers tend to receive higher average bonuses.

Nonetheless, around a third of bonuses were lower than the previous year, which is perhaps not surprising given the challenging economic circumstances, leading businesses to find ways to keep costs down.

Consistent with other specialisms, candidates expect hybrid and remote working options to be a permanent part of the deal when considering new roles.

### WHAT WE'RE SEEING IN THE DATA ENGINEERING MARKET

Businesses are typically looking for senior data engineering professionals with a strong track record. In other words, they are looking for professionals who will be able to 'bed in' quickly and who are not in need of extensive training or support, whether they are working in an office or remotely. To find this combination of skills in an already scarce pool of candidates is a challenge, meaning that data engineers currently have quite a strong negotiating position.

Data engineering roles are gradually becoming more defined, particularly by employers in the data processing sphere, which is a promising sign as the specialism evolves. It means that firms are placing a greater value on this skillset and growing their understanding of how data engineers can support their business efficiency and growth.



**MAX OLDENBEUVING**

Manager,  
Netherlands

# DATA & TECH ROLES

## SALARY AND DAY RATE BREAKDOWNS

### PERMANENT – AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead Level	Manager Level	Head of/Director
Annual Base Salary - € EUR					
Analytics Engineering	€38k	€61k	€76k	€98k	n/a
Business Intelligence	€36k	€60k	€73k	€86k	€114
Data Architecture	n/a	€78k	€98k	€117k	€130k
Data Engineering & Big Data	€48k	€64k	€96k	€105k	€137k

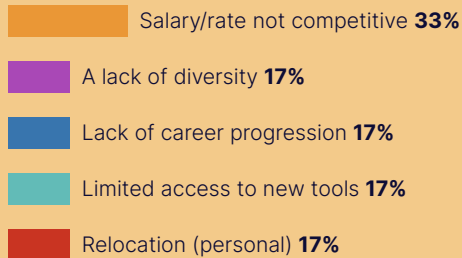
### CONTRACT – AVERAGE HOURLY RATES

Role Type	Entry Level	Mid-Level	Technical Lead Level	Manager Level	Head of/Director
Hourly Contract Rate - € EUR					
Analytics Engineering	n/a	€85	€105	€115	€125
Business Intelligence	n/a	€75	€100	€105	€120
Data Architecture	n/a	€85	€115	€120	n/a
Data Engineering & Big Data	n/a	€80	€105	€100	€135

# DATA & TECH ROLES

## KEY FINDINGS

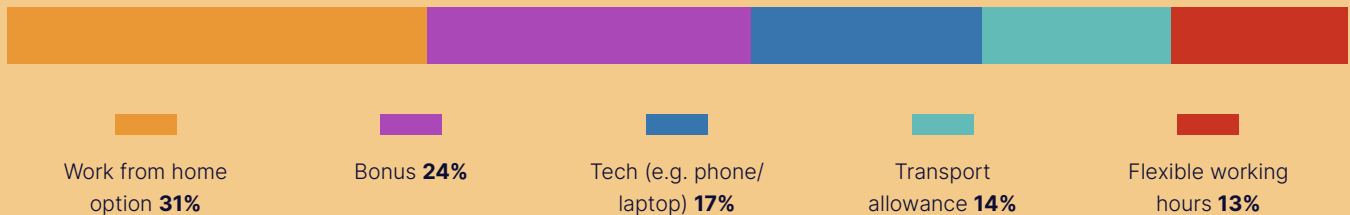
### TOP FIVE REASONS FOR LEAVING A ROLE



### TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN DATA & TECH JOBS

1. Python
2. SQL
3. Microsoft Azure
4. Power BI
5. Tableau

### TOP FIVE MOST DESIRABLE BENEFITS



# DATA & TECH ROLES

## KEY FINDINGS

84%

### FEEL AS OR MORE SECURE

In their role than in 2022, which is the most secure in the industry

84%

### WOULD LEAVE THEIR ROLE

If the right opportunity came up, the most likely in the industry

23%

### AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year. Actual achieved on average was 5%, the lowest in the industry

20%

### AVERAGE BONUS RECEIVED

The highest in the industry. Overall, 45% received a bonus in 2022, with 29% receiving a smaller bonus than the previous year

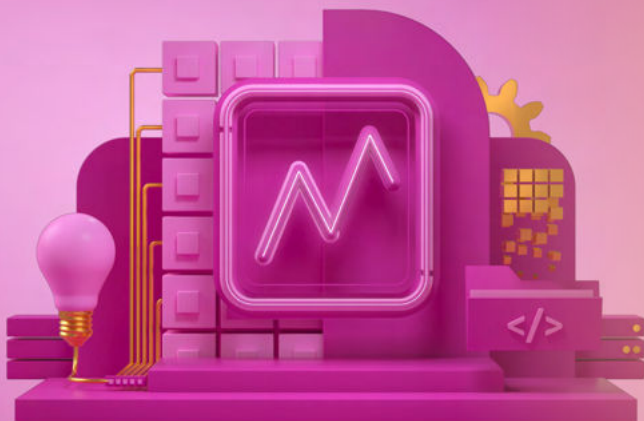
26%

### NUMBER OF FEMALE PROFESSIONALS

With the gender pay gap at -14%

3 YEARS

### AVERAGE LENGTH OF TIME IN A ROLE



# DATA SCIENCE ROLES

NETHERLANDS



# DATA SCIENCE ROLES

## NETHERLANDS

**Over the past year, the highest demand for data scientists has been in industries where they can quickly add value, most frequently in mature tech environments.** These are typically data-led companies where it is a core part of their product, for example software companies with data science products or functionality. There has been notably less demand for research-led data science teams, that are not tied to solving specific problems or building definite products.

With businesses gradually becoming clearer in their data science needs, we are seeing strong demand for specialist skills in solving specific problems, such as computer vision in natural language processing (NLP).

Currently it's an employer's market, with any new data science role receiving an influx of applications, meaning the challenge for companies is finding time to filter through that talent to find the right fit for their commercial problems and culture. Nonetheless, data science teams have been impacted by a spate of redundancies, leading to some reluctance to risk changing roles to pursue new opportunities.

### WHAT WE'RE SEEING IN THE DATA SCIENCE MARKET

Companies are looking for full stack or 'end-to-end' data scientists who can tackle an issue, design a model, put it into production and maintain it, whilst managing the stakeholder relationships, so these are the soft skills on the hit list for hiring managers.

Looking ahead, with generative artificial intelligence (AI) receiving a lot of press attention due to the rise of ChatGPT and similar products, we expect to see more businesses leverage and build on this open-source technology, including some which may not have ventured into this field before.

Looking at the role of women in this specialism, only 11% of data science professionals are female, with a gender pay gap of 19%. Clearly there is work to be done. The issue is fanned by the education field that talent emerges from, namely candidates with masters and PhDs in applied mathematics or statistics, which traditionally have poor gender diversity.



**CHARLOTTE YORK**

Manager,  
Netherlands

# DATA SCIENCE

## SALARY AND DAY RATE BREAKDOWNS

### PERMANENT – AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead Level	Manager Level	Head of/Director
Annual Base Salary - € EUR					
Data Scientist	€47k	€79k	€90k	€101k	€130k
Deep Learning and AI	€55k	€77k	€98k	€103k	€142k
Computer Vision	€58k	€83k	€103k	€110k	€105k
Quant Analytics (Finance)	€65k	€98k	€120k	€140k	€170k

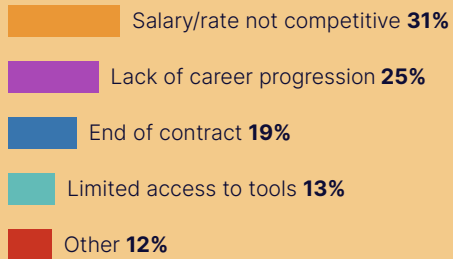
### CONTRACT – AVERAGE RATES

Role Type	Entry Level	Mid-Level	Technical Lead Level	Manager Level	Head of/Director
Hourly Contract Rate - € EUR					
Data Scientist	n/a	€80	€100	€115	€130
Deep Learning and AI	n/a	€85	€110	€130	€140
Computer Vision	n/a	€85	€115	€120	€145
Quant Analytics (Finance)	n/a	€100	€130	€125	€135

# DATA SCIENCE ROLES

## KEY FINDINGS

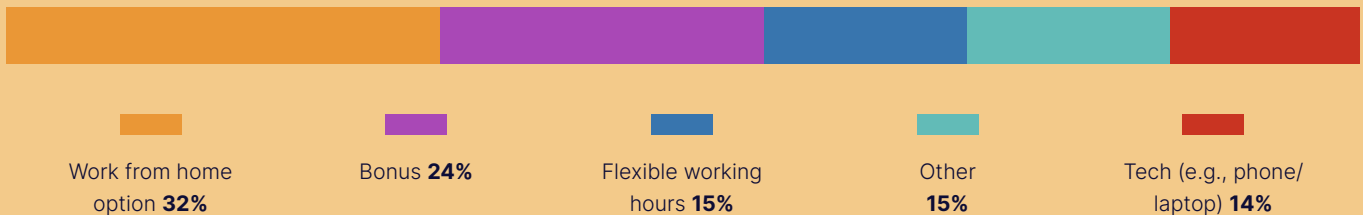
### TOP FIVE REASONS FOR LEAVING A ROLE



### TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN DATA SCIENCE JOBS



### TOP FIVE MOST DESIRABLE BENEFITS





# DATA & TECH ROLES

## KEY FINDINGS

70%

### FEEL AS OR MORE SECURE

In their role than in 2022

68%

### WOULD LEAVE THEIR ROLE

If the right opportunity came up, the least likely in the industry

21%

### AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year. Actual achieved on average was 10%

2 ½ YEARS

### AVERAGE LENGTH OF TIME IN A ROLE

The least time in the industry

11%

### NUMBER OF FEMALE PROFESSIONALS

The lowest in the industry, with a gender pay gap of 19%, the worst in the industry

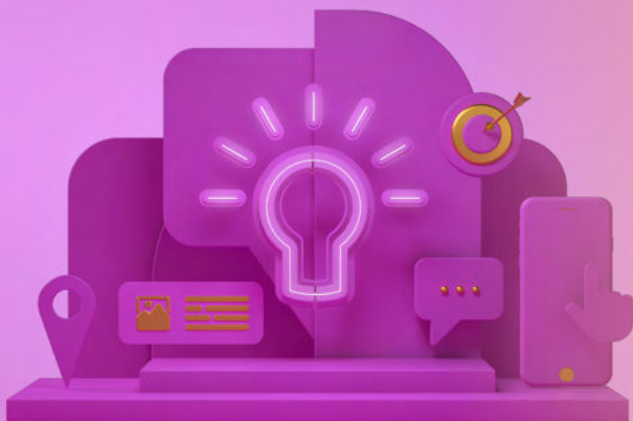
19%

### AVERAGE BONUS RECEIVED

The lowest in the industry, with 21% receiving a smaller bonus than the previous year. Overall, 36% received a bonus in 2022

# ADVANCED ANALYTICS ROLES

NETHERLANDS



# ADVANCED ANALYTICS ROLES

## NETHERLANDS

**All types of data analysts remain sought after by a cross-section of businesses and sectors.** Primarily they are looking for commercially led individuals who can get to the bottom of stakeholder's needs and provide solid recommendations based on thorough analysis.

Nonetheless, in the context of economic hardships, numerous companies have implemented hiring freezes over the past year and in many cases have been forced to make redundancies. Advanced analytics is the most established market with the highest number of professionals in circulation and, in current circumstances, this has led more than 40% to feel less secure in their roles than a year ago. Equally, all respondents who received a counteroffer when looking to leave a role accepted that counteroffer, which shows a dip in confidence as candidates prefer to avoid the risks associated with changing jobs in these uncertain times.

Overall, with companies looking to cut costs where they can, large pay increases are unusual in this climate.

### WHAT WE'RE SEEING IN THE ADVANCED ANALYTICS MARKET

Aside from the requisite tech skills, hirers are looking for professionals who understand how businesses operate and their priorities, and who feel comfortable working closely with senior stakeholders, offering them commercially-sound recommendations.

In fact, one of the primary reasons for candidates to be rejected over recent months has been through failing to instill confidence that they will be able to win the necessary buy-in from stakeholders and be able to present clear recommendations that will drive business revenue and savings.

In terms of gender, two thirds of professionals are female. One reason for this is the broader accessibility to the sector for both men and women. For example, in contrast to data science or data engineering that generally require a STEM degree, typically in applied mathematics or computer science, a more diverse set of qualifications and degrees can lead candidates into advanced analytics, including business or non-technical degrees. This opens the specialism up to many more people and pathways.



**FABIAN BRICENO**  
Senior Consultant,  
Netherlands



# ADVANCED ANALYTICS

## SALARY AND DAY RATE BREAKDOWNS

### PERMANENT – AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead Level	Manager Level	Head of/Director
Annual Base Salary - € EUR					
Campaign & CRM	€38k	€60k	€77k	€88k	€118k
Data Analyst	€44k	€58k	€84k	€101k	€123k
Research Analytics	€36k	€63k	€82k	€89k	€150k
Digital Analyst	€38k	€55k	€69k	€85k	€108k

### CONTRACT – AVERAGE RATES

Role Type	Entry Level	Mid-Level	Technical Lead Level	Manager Level	Head of/Director
Hourly Contract Rate - € EUR					
Campaign & CRM	n/a	€70	€95	€105	€120
Data Analyst	n/a	€70	€90	€100	€130
Research Analytics	n/a	€70	€85	€110	€115
Digital Analyst	n/a	€60	€70	€85	€110

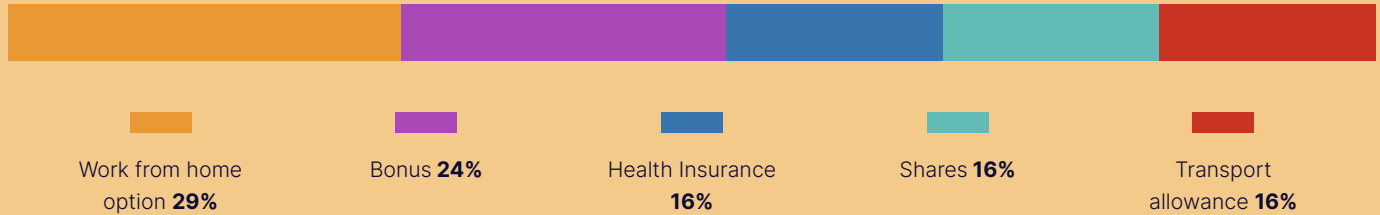
# ADVANCED ANALYTICS ROLES

## KEY FINDINGS

### TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN ADVANCED ANALYTICS JOBS

1. Excel
2. SQL
3. R
4. Tableau
5. Google Analytics/  
Google Tag Manager

### TOP FIVE MOST DESIRABLE BENEFITS



# ADVANCED ANALYTICS ROLES

## KEY FINDINGS

57%

**FEEL AS OR MORE SECURE**  
In their role than in 2022, the  
least secure in the industry

71%

**WOULD LEAVE THEIR ROLE**  
If the right opportunity came up

23%

**AVERAGE SALARY  
INCREASE SOUGHT**  
When applying to a role over the  
last year. Actual achieved was  
15% on average, the highest in  
the industry

3 YEARS

**AVERAGE LENGTH OF TIME  
IN A ROLE**

57%

**NUMBER OF FEMALE  
PROFESSIONALS**  
The highest in the industry, with  
a pay gap of 14%, the smallest in  
the industry

19%

**AVERAGE BONUS RECEIVED**  
With 29% receiving a smaller  
bonus than the previous year.  
Overall, 43% received a bonus  
in 2022

# CONTACT INFORMATION

Got any questions about the 2023 Salary Guide? Please feel free to contact us.



## OUR AMSTERDAM OFFICE

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