DATA & AI SALARY GUIDE 2023

The definite source of salary information for the UK data market



Analysis powered by



DATA & AI Salary Guide 2023



SALARY GUIDE CONTENTS 2023

Introduction \rightarrow About This Guide \rightarrow About The Analysis \rightarrow Industry Key Findings \rightarrow Remote & Hybrid Working \rightarrow Al & Emerging Tech \rightarrow Data & Tech \rightarrow

Data Science \rightarrow

Digital Analytics \rightarrow

Marketing & Insights \rightarrow

Risk Analytics \rightarrow

Contract →

The Northern Hub \rightarrow

Contact Us →



Analysis powered by Rockborne

DATA & AI Salary Guide 2023

Welcome to the 12th annual 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 UK.

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).





Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

SALARY GUIDE **INTRODUCTION**

It is my pleasure to introduce you to the 12th edition of our annual UK Salary Guide.

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. That said, the average change in pay has seen an increase of 13%, 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 rating flexible and remote working options as the two most desirable benefits.

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.

We may also still be experiencing the tremors left over from COVID-19, with health insurance being rated in the top three for the first time, indicating that health considerations are clearly still front-of-mind.



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

SALARY GUIDE **INTRODUCTION** A WORD FROM HARNHAM'S CEO

It's brilliant to see innovation hubs continuing to thrive across the country rather than being limited to London. In the Northern Hub, for example, Birmingham, Manchester and Leeds are successfully reinforcing their reputations as tech strongholds.

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 29% of data professionals are women, up from 22% last year. 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.

- Dave Farmer / CEO of Harnham



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.



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

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 UK in the last 12 months.
- Data from roles recruited by Harnham UK.
- 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).*
- I Mid-Level (Experienced hands-on position, remaining in a technical capacity and possibly leading projects).
- I Technical Lead or Manager Level (Within a role that has moved from technical work and into a management position, or having a senior technical hands-on position).
- I 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.



Analysis powered by



DATA & AI Salary Guide 2023

ABOUT THE ANALYSIS

The analysis for this report was done by a team of Rockborne data consultants led by Mohammed Dougramaii. 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, empowering them to make informed career decisions and stay abreast of developing trends in their industry and discipline. Salary checker available at:

harnham.com/data-ai-analytics-salary-guides-2023

ABOUT

ROCKBORNE



- Waseem Ali / CEO of 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



Analysis powered by

Rockborne

DATA & AL Salary Guide 2023



TOP FIVE REASONS FOR LEAVING A ROLE



TOP FIVE MOST DESIRABLE BENEFITS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN UK DATA & ANALYTICS MARKET

1. SQL	3. Excel	5. Tableau

2. Python	 Power BI
-----------	------------------------------





KEY FINDINGS

FEEL AS OR MORE SECURE In their role than in 2022



WOULD LEAVE THEIR ROLE

If the right opportunity came up

21%

AVERAGE SALARY INCREASE SOUGHT When applying to a role over the last year



AVERAGE CHANGE IN PAY FROM 2022

21%

RECEIVED A COUNTEROFFER Of these 14% accepted the offer



WOULD LIKE TO WORK FULLY REMOTE

29%

NUMBER OF FEMALE PROFESSIONALS Up from 22% last year



AVERAGE LENGTH OF TIME IN A ROLE



Analysis powered by

DATA & AI Salary Guide 2023

REMOTE & HYBRID WORKING

Like last year, most businesses are currently working on a hybrid basis, with only 4% of employees returning to the office full-time post-COVID.

Because of this, the average data professional still spends **one and a half days** in the office per week, a figure that's consistent across all seniority levels.

Flexible working has become the new normal. So much so, that many employees now expect a certain degree of flexibility when it comes to their working conditions. And while most employers are happy to accommodate this, many organisations are now establishing formalised agreements with their employees to ensure that people are committing to a set number of days in the office.

In fact, this year has seen a significant influx of formalised agreements, with 37% of employees claiming they have a remote or hybrid work agreement explicitly outlined in their contract, compared to just 15% who did last year. We can expect

this figure to grow in the coming years, as jobs that require employees to be fully on-site become a thing of the past.

Unsurprisingly, remote working processes are impacting how the workforce is distributed geographically by opening the talent pool to those located further afield, with 2% of the UK's fully remote workforce located outside of the UK.



Analysis powered by

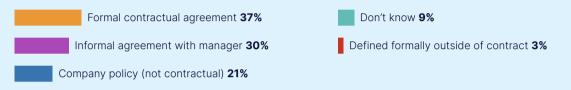
Rockborne

DATA & AI Salary Guide 2023

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





Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

REMOTE & HYBRID

KEY FINDINGS



DAYS A WEEK On average spent working in the office



ADOPTED A HYBRID WORKING MODEL



RETURNED TO OFFICE

Full-time after COVID-19



OF THE UK'S REMOTE WORKFORCE ARE BASED **OUTSIDE OF THE UK**

le harnham

Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

AI AND EMERGING TECHNOLOGY

Artificial intelligence (AI) is on nearly everyone's radar.

Its widespread potential spans across a range of industries, and as the global corporate landscape becomes increasingly more competitive, more companies will look to AI to help streamline processes and maximise efficiency.

We're seeing a majority of our clients put a real focus on Al. And it's been encouraging to see this happening amidst rising inflation and budget constraints. Even companies in the early stages of their "Al journey" are making strides and integrating Al into their broader data strategies.

But that's not to say that the Al hiring market hasn't been impacted by the wider economic climate. With rising inflation and heightened business costs, we've not seen the same level of growth that we saw coming out of the pandemic, where record numbers of Al professionals were being hired.

That being said, the Al job market is still strong because companies are starting to understand just how valuable Al can

be when it's implemented correctly—and the excitement is spreading.



NICK MANDELLA Associate Director, Data Science



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

AI AND EMERGING TECHNOLOGY

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



Availability of Talent 26%

Big Data and Advanced Analytics 8%

Remote Work 7%

Cloud Computing and DevOps 5%

Cookie depreciation 4%

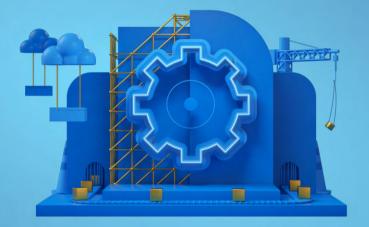
Economic Conditions 1%



Analysis powered by



DATA & Al Salary Guide 2023





Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

DATA ARCHITECTURE, DATA GOVERNANCE AND DEVOPS

Economic market conditions have forced businesses across the industry to be more conservative with pay rises and financial incentives. Of course, this doesn't mean that candidates' expectations have lessened. In fact, despite candidates rating bonuses as the joint most desirable benefit, 45% received a smaller bonus this year compared to 2022.

However, there are non-financial options for attracting and retaining talent. Remote working options, for example, remain high on the candidate priority list, with 25% rating it as a most desirable benefit and 37% showing a preference to work remotely full time.

Despite certain salary expectations not being met, job security in the market has remained very buoyant, with 88% reporting to feel as or more secure in their role than in 2022 and employees spending an average of almost 4 years in the same role.

WHAT WE'RE SEEING IN THE DATA & TECH MARKET

As businesses become increasingly data-centric – having recognised the value of harnessing the abundance of data that modern organisations are sitting on – hires into data teams will no doubt increase over the coming years.

However, as budgets are squeezed, the types of roles in demand will likely change, with small to mid-sized companies seeking candidates who can wear multiple hats. New roles that incorporate two traditionally separate roles are also popping up, such as positions within DevOps.

We are also seeing surges in demand for roles able to straddle multiple teams. For example, there is a trend of data product managers being expected to work alongside technical and non-technical stakeholders to create data solutions to business problems in the form of a tangible product.

Regulation is a clear driving force in this sector. Guidelines are constantly racing to keep up with rapid developments in technology, and as the volumes of data available to businesses grows exponentially, many will be looking for those with data governance and management experience to help streamline and monitor business processes.



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

KEY FINDINGS

TOP FIVE REASONS FOR LEAVING A ROLE



TOP FIVE MOST DESIRABLE BENEFITS

DATA ARCHITECTURE, DATA GOVERNANCE, DEVOPS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN DATA & TECH JOBS

1. SQL	3. Microsoft Azure	5. Python
I. OQL		J . i ytho

2. Excel 4. Power BI



KEY FINDINGS

8

DATA ARCHITECTURE, DATA GOVERNANCE, DEVOPS

FEEL AS OR MORE SECURE In their role than in 2022



WOULD LEAVE THEIR ROLE If the right opportunity came up



AVERAGE SALARY INCREASE SOUGHT When applying to a role over the last year and achieved an average 11% change in pay



AVERAGE LENGTH OF TIME IN A ROLE

23%

NUMBER OF FEMALE PROFESSIONALS 37%

WOULD LIKE TO WORK FULLY REMOTE



Analysis powered by

Rockborne

DATA & Al Salary Guide 2023

ZOOMED IN: SOFTWARE ENGINEERING

This year, a combination of inflation, recessionary fears and a drop in company spending has impacted company hiring in the software engineering space.

Instead of aggressive hiring to secure good talent, most companies are focused on making key strategic hires only.

As the market has become more saturated it has created an extremely competitive environment with most roles receiving a high volume of applicants.

Roles presenting the highest demand include:

- AI / ML engineering, requiring those with ML or MLOps experience.
- Cloud engineering, requiring DevOps skillsets.
- Experience with testing and TDD in particular (increasingly sought after as a standard part of an engineer's skillset).

WHAT WE'RE SEEING IN SOFTWARE ENGINEERING

Remote working is still the most sought-after benefit for candidates. Companies are gradually moving back to offices, and most employees are happy to accept hybrid working. However, because people have become acclimatised to working remotely, they are not willing to return to the office full-time, and many candidates will still only accept fully remote roles.

When it comes to salaries, the post-COVID market presented an anomaly where candidates were in such high demand that they could often dictate pay. The market has since calmed down and returned to normal, but salary expectations remain inflated.

Candidates are also more cautious moving roles due to the mass layoffs seen last year, therefore job security is one of the main factors that candidates consider when changing jobs.

Cost saving and tactful hiring strategies this year, combined with top talent being more conservative with their salary expectations, will likely result in a return to a more even playing field.



HENRY BUNCE Senior Recruitment Consultant, Software Engineering



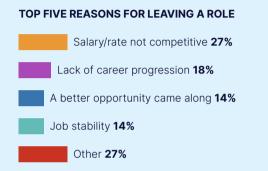
Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

SOFTWARE ENGINEERING ROLES

KEY FINDINGS



TOP FIVE MOST DESIRABLE BENEFITS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN SOFTWARE ENGINEERING JOBS

1. Python	3. AWS	5. C#
2. SQL	4. Java	



SOFTWARE ENGINEERING ROLES

KEY FINDINGS



AVERAGE BONUS With 83% receiving a smaller bonus than in 2022



RECEIVED A COUNTEROFFER

Of these 33% accepted the offer



FEEL AS OR MORE SECURE In their role than in 2022



AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year and achieved an average 10% change in pay

15%

NUMBER OF FEMALE PROFESSIONALS



WOULD LIKE TO WORK FULLY REMOTE



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

UK

ZOOMED IN: BUSINESS INTELLIGENCE

The business intelligence (BI) market has seen a large increase in both short- and long-term goals for a data function.

As we have seen, progression opportunities surpass salary as a candidate's main motivation for moving. A fact exemplified by the increase in the average tenure of a candidate in their role and, tellingly, the fact that 83% feel more secure in their roles, the highest in the industry.

WHAT WE'RE SEEING IN BUSINESS INTELLIGENCE

SQL still holds sway as the basis for BI. Modern stack tools such as Python, DBT, Fivetran and others have been made to integrate effectively to enable 'self-serve' analytics with an increase in need for data visualisation specialists to maximise these tools' output.

Outside of technologies, the commercial application is essential for candidates in BI. Companies are desperate to find candidates who can 'work with the end in mind' to deliver solutions using data.

Providing engaging and insightful dashboards and visualisations has proved a priority for the basis of a successful data function that can have a daily, monthly and annual impact on a business.



TOM BRAMMER Manager, Business Intelligence



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

BUSINESS INTELLIGENCE ROLES

KEY FINDINGS

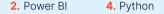
Comparison Comparison</t

TOP FIVE MOST DESIRABLE BENEFITS

Poor management 14%

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN BUSINESS INTELLIGENCE JOBS

1. SQL	3. Excel	5. Tableau
--------	----------	------------





BUSINESS INTELLIGENCE ROLES

KEY FINDINGS

8

%

FEEL AS OR MORE SECURE In their role than in 2022



WOULD LEAVE THEIR ROLE If the right opportunity came up

27%

RECEIVED A COUNTEROFFER Of these 10% accepted the offer



WOULD LIKE TO WORK FULLY REMOTE

20%

NUMBER OF FEMALE PROFESSIONALS



AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year and achieved an average 12% change in pay



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

UK

ZOOMED IN: DATA ENGINEERING

Data engineering has seen growth across multiple sectors including fintech, insurance and travel. That said, as is indicated by the average pay change of 16% not meeting the 22% expectations of candidates, and bonuses dipping, many companies have taken a more frugal approach this year.

The explosive demand for data candidates last year inflated salaries to an unsustainable level, but this year, with jobs flattening to more usual volumes combined with the impact of economic market challenges, salaries have unsurprisingly followed suit.

With 83% of candidates reportedly feeling secure in their roles, and with less job opportunities in the market, we're unlikely to see as many candidates jumping ship in the year ahead, choosing instead to stay put where possible.

WHAT WE'RE SEEING IN DATA ENGINEERING

We're seeing increasing numbers of companies shifting towards Data Mesh/Data Fabric approaches in their hiring strategies, and on the technology side, beginning to favour those with experience with modern stacks, such as: Snowflake, Databricks and dbt, whilst still having knowledge of more recent fundamental techs like Airflow, CI/CD and Terraform.

To compliment these technical abilities, candidates are now expected to be able to articulate how the technology they are using has helped their stakeholders or impacted the wider business, in order to showcase that they have identified and understood the business problem and solved it.



HENRY RODRIGUES Senior Manager, Data Engineering



Analysis powered by

DATA & Al Salary Guide 2023

DATA ENGINEERING ROLES

KEY FINDINGS

TOP FIVE REASONS FOR LEAVING A ROLE



TOP FIVE MOST DESIRABLE BENEFITS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN DATA ENGINEERING JOBS

1. Python	3. AWS	5. Microsoft Azure /
		Power BI
2. SQL	 Google Cloud Platform 	



DATA ENGINEERING ROLES

KEY FINDINGS

|4%

AVERAGE BONUS With 46% receiving a smaller bonus than in 2022



FEEL AS OR MORE SECURE In their role than in 2022



WOULD LIKE TO WORK FULLY REMOTE



AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year and achieved an average 16% change in pay

12%

NUMBER OF FEMALE PROFESSIONALS



AVERAGE LENGTH OF TIME IN A ROLE



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

DATA & TECH UK SALARY AND DAY RATE BREAKDOWNS

PERMANENT – AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Annual	Base Salary - £GBP Lon	don • UK North • Outside	London	
Business Intelligence	£40k £38k £40k	£57k £50k £50k	£74k £69k £72k	£108k £89k £93k
Data Architecture	n/a n/a n/a	£72k £60k £60k	£103k £80k £89k	£111k £105k £109k
Data Engineering & Big Data	£40k £38k £33k	£61k £53k £54k	£90k £75k £82k	£110k £93k £113k
Data Governance	£46k £44k £44k	£64k £59k £60k	£79k £73k £78k	£108k £106k £96k
DevOps	£45k £40k £40k	£75k £67k £67k	£105k £95k £95k	£130k £102k £105k
Software Engineering	£40k £37k £40k	£70k £64k £64k	£100k £93k £93k	£125k £102k £100k

CONTRACT – AVERAGE DAY RATES

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Daily Co	ontract Rate - £GBP Lor	don • UK North • Outside	London	
Business Intelligence	£300 £300 £325	£600 £450 £550	£700 £500 £700	£1100 £900 £900
Data Architecture	£400 £325 £325	£675 £650 £650	£750 £725 £750	£1000 £950 £975
Data Engineering & Big Data	£500 £450 £475	£700 £600 £600	£750 £650 £650	£1000 £850 £875
Data Governance	£400 £325 £400	£650 £675 £650	£850 £775 £800	£900 n/a n/a
Software Engineering	£375 £350 £350	£700 £550 £600	£875 £875 £875	£975 £1000 £900



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023



DATA SCIENCE ROLES



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

DATA SCIENCE ROLES

UK

Unsurprisingly, explosions in AI and ML development are driving much of the growth being seen in the Data Science field.

It's also having an impact on the types of the jobs in high demand, including brand new roles centred around Chat GPT and **Generative AI.**

Demand for ML engineering roles has been rising over the last few years, with a more recent shift towards MLOps professionals able to bridge the gap between data scientists and data engineers.

However, the field of data science is still viewed by some as a luxury rather than a necessity. It is therefore impacted when costs are cut, or budgets stretched, and budgets have taken a hit – with 46% of candidates receiving a smaller bonus than in 2022, companies are evidently unable to sustain the same level of financial incentives as in previous years.

WHAT WE'RE SEEING IN THE DATA SCIENCE MARKET

Businesses are increasingly seeking candidates with strong technical abilities paired with high commercial acumen, storytelling capabilities and stakeholder management skills, enabling them to demonstrate and 'sell' the business value of their work.

There is clearly a high level of fluidity in the market, with candidates quick to move if offered a significant pay increase, fuelled by an increased number of opportunities as companies look to hire into and expand their AI and data science teams.

The disconnect between salary expectations and realities reflects a widespread trend of candidate remuneration running far above the market rate – typically heightened by tech companies (more often tech giants) being able to offer higher salaries – this establishes salary benchmarks which cannot be matched by most companies.



ROSIE O'CALLAGHAN Manager,

Data Science & Machine Learning



Analysis powered by

DATA & AI Salary Guide 2023

DATA SCIENCE UK SALARY AND DAY RATE BREAKDOWNS

PERMANENT - AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Annual	Base Salary - £GBP Lon	don • UK North • Outside	London	
Computer Vision	£45K n/a n/a	£70k £65k £68k	£84k £74k n/a	£110k £98k £101k
Data Science	£47k £41k £44k	£63k £58k £60k	£87k £77k £74k	£115k £89k £101k
Deep Learning & Al	£50k £48k £48k	£80k £75k £79k	£91k £80k £88k	£120k £106k £107k
ML Engineering	£51k £49K £48k	£79k £75k £77k	£96k £85k £93k	£122k £101k £110k
MLOps	£44k £40k £40k	£75k £65k £72k	£95k £83k £90k	£125k £101k £105k
Natural Language Processing	£47k £38k £41k	£70k £62k £65k	£87k £80k £80k	£110k £90k £93k

CONTRACT - AVERAGE DAY RATES

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Daily Co	ontract Rate - £GBP Lor	don • UK North • Outside	London	
Computer Vision	n/a n/a n/a	£500 n/a n/a	£650 £600 £625	£875 £825 £825
Data Science	£450 £450 £450	£550 £500 £550	£650 £625 £650	£900 £825 £875
Deep Learning & Al	£475 £450 £475	£600 £575 £600	£700 £625 £650	£875 £800 £875
ML Engineering	£450 £450 £450	£600 £550 £575	£700 £650 £700	£925 £825 £850
MLOps	£400 £400 £400	£575 £500 £550	£650 £600 £625	n/a n/a n/a
Natural Language Processing	£450 £450 £450	£650 £600 £600	£750 £700 £700	n/a n/a n/a



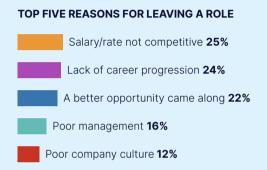
Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

DATA SCIENCE ROLES

KEY FINDINGS



TOP FIVE MOST DESIRABLE BENEFITS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN DATA SCIENCE JOBS

1. Python	3. AWS	5. Excel
2. SQL	4. R	



DATA SCIENCE ROLES

KEY FINDINGS

%

FEEL AS OR MORE SECURE In their role than in 2022



WOULD LEAVE THEIR ROLE

If the right opportunity came up, the joint highest in the industry



RECEIVED A COUNTEROFFER Of these 10% accepted the offer



AVERAGE LENGTH OF TIME IN A ROLE The least time in the industry

25%

NUMBER OF FEMALE PROFESSIONALS Up from 22% last year



WOULD LIKE TO WORK FULLY REMOTE



Analysis powered by

Rockborne

DATA & Al Salary Guide 2023



DIGITAL ANALYTICS ROLES



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

DIGITAL ANALYTICS ROLES

UK

Once again, employees cite a lack of job progression as their number one reason for leaving a role.

This long-term trend highlights the importance of facilitating growth and development opportunities in order to increase employee retention.

L&D and career progression is clearly playing a greater and more critical role in the job search process than salary – as demonstrated by the low rate of counteroffer acceptance in the market.

Roles in digital insight, implementation and CRO remain popular, whilst holding an intermediate level of SQL has become increasingly sought after for mid-level roles over the last 12 months, in addition to relaying insights back to stakeholders.

The post-COVID pay rises have stagnated over the past year. Whilst applicants' expectations have remained high, companies have been more reluctant to offer increases in the way they were prompted to in 2021/2022. This could be seen as a contributing factor to extended tenures in each role – standing at more than three years on average.

WHAT WE'RE SEEING IN THE DIGITAL ANALYTICS MARKET

The results give a clear roadmap for employers. As in most cases, a large portion of the workforce are open to the right opportunity, highlighting the importance of being able to tap into the passive job seeker market.

Alongside job progression, remote and flexible working arrangements are still a key consideration for talent. Just over one in three people want to be fully remote – a trend being reflected in the increased offering of remote opportunities, mainly on the agency and consultancy side of the sector.

There has also been a marked increase in flexible working options such as four day weeks and working abroad. This is particularly true of niche roles, such as implementation, where companies need to go beyond a standard work-from-home policy to secure candidates in an already talent-scarce market.



ADAM OSBORNE Manager, Digital Analytics



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

DIGITAL ANALYTICS UK

SALARY AND DAY RATE BREAKDOWNS

PERMANENT – AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Annual	Base Salary - £GBP Lon	don • UK North • Outside	London	
Conversion Rate Optimisation	£35k £34k £34k	£57k £45k £55k	£72k £46k £60k	£92k £90k £95k
Implementation	£38k £37k £36k	£62k £53k £58k	£86k £67k £73k	£103k £95k £98k
Product Analytics	£41k £36k £40k	£68k £55k £58K	£89k £77k £80k	£99k £95k £98k
Web Analytics	£36k £34k £34k	£59k £43k £44k	£75k £65k £63k	£99k £95k £93k

CONTRACT – AVERAGE DAY RATES

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Daily Contract Rate - £GBP London • UK North • Outside London				
Conversion Rate Optimisation	£375 £375 £400	£500 £450 £450	£600 £600 £600	£700 £750 £750
Implementation	n/a n/a n/a	£450 £450 £425	£625 £550 £600	£700 £675 £700
Programmatic	£300 £300 £350	£400 £400 £400	£550 £500 £500	£650 £650 £650
Product Analytics	n/a n/a n/a	£400 £400 £400	£500 £500 £475	£625 £600 £600
Web Analytics	£300 £275 £300	£450 £400 £425	£650 £600 £600	£850 £850 £900



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

DIGITAL ANALYTICS ROLES

KEY FINDINGS

Comparison Comparison</t

Salary/rate not competitive 18%

Poor management **12%**

TOP FIVE MOST DESIRABLE BENEFITS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN DIGITAL ANALYTICS JOBS

 Google Analytics 	 Google Tag Manager 	5. SQL
2. Adobe Analytics	4. Excel	



DIGITAL ANALYTICS ROLES

KEY FINDINGS

6

FEEL AS OR MORE SECURE In their role than in 2022



WOULD LEAVE THEIR ROLE

If the right opportunity came up



AVERAGE SALARY INCREASE SOUGHT When applying to a role over the last year, achieving a 9% average change in pay



AVERAGE LENGTH OF TIME IN A ROLE The most time in the industry

31%

NUMBER OF FEMALE PROFESSIONALS Down from 32% last year



WOULD LIKE TO WORK FULLY REMOTE

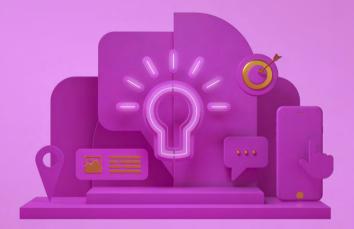
The joint highest in the industry



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023



MARKETING & INSIGHT ROLES



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023 For more information visit us at **harnham.com**

Ξ

MARKETING & INSIGHT ROLES

UK

The sector undoubtably felt the impact of the global economic landscape last year, impacting bonus potential and causing some companies to put roles temporarily on hold, or implement hiring freezes.

But the tide is turning, with hiring levels recovering and new roles appearing. In particular, the more 'traditional' sectors such as financial services, insurance and retail have all experienced major growth this year.

Clearly this hasn't damaged job security, with 81% feeling as or more secure in their role than in 2022. This figure is likely influenced by the increased number of counteroffers that candidates are currently receiving, which is bolstering their view of the market.

Hiring managers are on the hunt for candidates who are proven problem solvers, logical thinkers and individuals who can break down complex information into clear and concise recommendations that are commercially viable.

WHAT WE'RE SEEING IN THE MARKETING & INSIGHT MARKET

Data professionals working in marketing & insights showed the lowest desire to work fully remotely, and this fits with the shift in expectations we are seeing post-COVID, with candidate showing more interest in going into the office due to the collaborative nature of their roles.

Despite professionals in the sector receiving the largest change in pay across the industry, these still fail to meet even higher expectations. These have been influenced by the vast and somewhat extreme salary rises seen in 2021/22 as companies struggled to remain competitive and were forced to throw everything they could at securing talent.

However, more recently, companies are acting slightly more conservatively in their offers and are expecting to see more from a candidate in order to justify a pay rise.



TALITHA BOITEL-GILL Director, Marketing & Insight



Analysis powered by

DATA & AI Salary Guide 2023

MARKETING & INSIGHT UK BREAKDOWNS

PERMANENT – AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director	
Annual	Annual Base Salary - £GBP London • UK North • Outside London				
CRM	£33k £33k £33k	£54k £52k £54k	£65k £62k £66k	£95k £92k £92k	
Data Strategy	£35k £34k £34k	£50k £45k £45k	£72k £67k £68k	£104k £90k £90k	
Econometrics	£38k £37k £37k	£57k £56k £55k	£74k £70k £73k	£95k £92k £95k	
Insight Analytics	£40k £32k £35k	£60k £59k £59k	£84k £72k £79k	£100k £98k £95k	
Market Research	£32k £30k £30k	£48k £45k £45k	£56k £54k £56k	£78k £78k £76k	
Pricing Analytics	£37k £30k £35k	£50k £45k 45k	£67k £56k £62k	£103k £100k £100k	
Product Manager	£45k n/a n/a	£60k £52k £57k	£85k £76k £84k	£120k £110k £110k	

CONTRACT – AVERAGE DAY RATES

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Daily Contract Rate - £GBP London • UK North • Outside London				
CRM	£300 n/a n/a	£375 £300 £325	£500 £425 £475	£650 £600 £650
Insight Analytics	£350 n/a £320	£450 £400 £425	£550 £550 £550	£700 £625 £700
Market Research	£250 n/a n/a	£350 £300 £300	£475 £450 £450	£600 £600 £600
Product Manager	n/a n/a n/a	£400 £375 £400	£575 £550 £550	£650 £650 £650



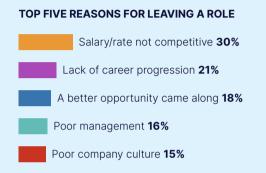
Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

MARKETING & INSIGHT ROLES

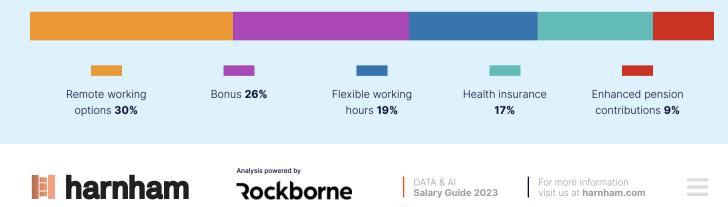
KEY FINDINGS



TOP FIVE MOST DESIRABLE BENEFITS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS **IN MARKETING & INSIGHT JOBS**

1. SQL	3. Power BI	5. Tableau		
2. Excel	4. Python			



MARKETING & INSIGHT ROLES

KEY FINDINGS

8

%

FEEL AS OR MORE SECURE In their role than in 2022



WOULD LEAVE THEIR ROLE

If the right opportunity came up



AVERAGE SALARY INCREASE SOUGHT When applying to a role over the last year, achieving a 14% average change in pay



AVERAGE LENGTH OF TIME IN A ROLE



NUMBER OF FEMALE PROFESSIONALS The highest in the industry and up from 42% last year

26%

WOULD LIKE TO WORK FULLY REMOTE

The lowest in the industry



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023



RISK ANALYTICS ROLES



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023 For more information visit us at **harnham.com**

Ξ

RISK ANALYTICS ROLES

UK

The risk analytics market has stabilised following a period of uncertainty at the start of the year, where we saw redundancies across the tech and banking sectors.

As a result, insecurity around job safety has reduced and the market is now experiencing a much steadier flow of roles.

Overall, job levels are still lower than the highs of 2021/2022 but this likely due to the post-COVID hiring frenzy returning to more sustainable levels. Whilst employers are now being more conversative with their pay increases, offering rises more in line with historic figures, candidate expectations haven't yet reduced from last year's peaks.

However, recruiting risk analytics talent can be a costly and timeconsuming endeavour, so some companies are still heavily utilising counteroffers as a tool to retain employees.

WHAT WE'RE SEEING IN RISK ANALYTICS MARKET

Growth across risk sub-sectors, such as tech, banking and consulting, has been variable throughout the year, with periods of strong progress in banking followed by advances within fintech companies. Risk analytics hiring has remained steady across the consulting space throughout, mostly due to the demand for regulatory focused projects such as IFRS9 and IRB.

For hiring managers, candidates able to demonstrate strong communication skills and who have a proven ability to handle stakeholders, are easily the most highly sought after. When it comes to technical knowhow, experience with SQL is now close to a must-have in risk analytics. The use of Python continues to climb, but some companies are still transitioning from SAS which is proving to be a gradual shift.

When it comes to working practices, the majority of candidates are eager to secure hybrid working arrangements, with remote working options rated as the second most desirable benefit. However, a much smaller percentage are pursuing fully remote work. Those that are, are largely looking for roles that allow employees to work from abroad or are working in more remote areas of the UK where local opportunities are limited and travel to hubs costly.



CONOR LARKIN Senior Manager, Risk Analytics

📙 harnham

Analysis powered by

DATA & AI Salary Guide 2023

RISK ANALYTICS UK salary and day rate breakdowns

PERMANENT – AVERAGE ANNUAL SALARY

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Annual Base Salary - £GBP London • UK North • Outside London				
Decision Systems	£36k £32k £35k	£56k £52k £52k	£70k £63k £62k	£112k £105k n/a
Fraud Analytics	£38k £34k £36k	£58k £57k £57k	£75k £69k £66k	£104k £102k £99k
Modelling (Decision Science)	£40k £32k £34k	£65k £60k £62k	£87k £73k £80k	£150k £133k £134k
Portfolio Management	£37k £36k £36k	£62k £56k £56k	£81k £70k £76k	£130k £115k £120k

CONTRACT – AVERAGE DAY RATES

Role Type	Entry Level	Mid-Level	Technical Lead/ Manager	Head of/ Director
Daily Contract Rate - £GBP London • UK North • Outside London				
Decision Systems	n/a n/a n/a	£450 £400 £425	£700 £700 £700	£850 £800 £850
Fraud Analytics	n/a n/a n/a	£525 £525 £525	£700 £600 £600	£800 £800 £800
Modelling (Decision Science)	n/a n/a n/a	£650 £500 £500	£700 £650 £650	£800 £750 £750
Portfolio Management	n/a n/a n/a	£500 £450 £500	£775 £700 £700	£850 £825 £850



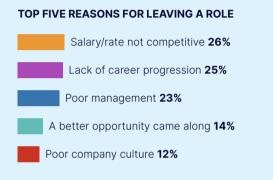
Analysis powered by

Rockborne

DATA & Al Salary Guide 2023

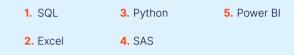
RISK ANALYTICS ROLES

KEY FINDINGS



TOP FIVE MOST DESIRABLE BENEFITS

TOP FIVE TECHNOLOGIES USED BY PROFESSIONALS IN RISK ANALYTICS





RISK ANALYTICS ROLES

KEY FINDINGS

FEEL AS OR MORE SECURE In their role than in 2022. The most secure in the industry



RECIEVED A COUNTEROFFER

Of these 24% accepted the offer. The highest in the industry



AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year, achieving a 13% average change in pay



WOULD LIKE TO WORK FULLY REMOTE



NUMBER OF FEMALE PROFESSIONALS Up from 23% last year

📙 harnham

Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

THE STATE OF CONTRACT WORK

2022 saw a surge in clients bringing on extra resource to kick off a backlog of projects, so it comes as no surprise that 59% of respondents received contract extensions of an average length of six months, up from 12 weeks last year.

Clients that have the capacity to bring on permanent staff are wasting no time in converting strong freelance resource, with 23% of respondents being offered a permanent position at the end of their latest contract. However, we found only 21% of respondents accepted, and those that did took a 29% decrease in their pay as a result.

We have seen a trend of clients using contractors in a more flexible way, to supplement permanent hiring but also to support end clients. 'Try before you buy' is also in play, with surges in proof of concepts and COVID uncertainty creating some hesitancy to hire permanent resource.

Furthermore, the sector has seen an emergence of the analytics engineer – a hybrid role much like a data engineer but with a better view of where the data is going front end (dbt and Snowflake are required technologies) – and an increase in research roles as larger companies diversify their offerings, for example banking moving into fintech.

IR35

With the IR35 changes and realities from 2021 settling in, it is interesting to note that only 59% of respondents expected an increase in daily rate for an inside IR35 role, compared to 94% in the previous year.

Some of the bigger organisations have taken a strong stance of steering away from engaging with PSCs and the result is a reluctance from contractors to turn down inside IR35 roles. 34% of respondents expressed that they still would, down from 45% the previous year.



KIRSTY GARSHONG Associate Director, Contract



Analysis powered by

DATA & AI Salary Guide 2023

THE STATE OF CONTRACT WORK

UK

RECEIVED A DAY-RATE INCREASE



RECEIVED AN EXTENSION TO THEIR LATEST CONTRACT

With an average extension of 28 weeks



OFFERED A PERMANENT POSITION AT THE END OF THEIR LATEST CONTRACT Only 21% accepted, and 29% of these saw their pay decrease as a result



EXPECT THEIR DAILY RATE TO INCREASE FOR THEIR ROLE INSIDE IR35

Down from 94% in the previous year



TURNED DOWN A ROLE DUE TO AN INSIDE IR35 DETERMINATION



CONTRACTED OUTSIDE IR35

In their most recent position. Down from 46% last year



Analysis powered by

Rockborne

DATA & AI Salary Guide 2023

THE NORTHERN HUB

The volatile climate of the last few years has been challenging for many businesses in the data industry – with larger organisations, most notably in the financial services, insurance and energy sectors, best able to weather the stormy conditions.

However, sentiment is changing and we're starting to see more medium sized and smaller businesses increase their hiring activities, which is a positive sign.

The UK's technology sector outside of London continues to flourish with Birmingham, Leeds and Greater Manchester maintaining their innovation strongholds and areas such as the North-East and East Midlands are beginning to see major growth.

These geographical shifts are undoubtedly impacting how the talent market is operating, as businesses in the Northern Hub adapt to remain competitive with London firms. For example, as more teams are built in these areas, increasing numbers of senior hires are needed, compelling northern-based companies to offer lucrative packages in order to attract the best talent.

London weighting is becoming antiquated. Although there are

some clients who still operate with location-based salaries, for the most part the policy is outdated, particularly with remote working. It has a detrimental effect on Northern growth, so we're likely to see it disappear over time.

Although there are still data professionals working remotely for London-based companies from other parts of the country, we are expecting to see this number gradually decrease over the next few years.

Many companies are actively encouraging employees to attend the office more frequently due to a fall in productivity levels in some areas. This, combined with candidates eager to return to an office environment, means that professionals in the north may be more likely to look for roles locally.

Hiring managers continue to seek talent who are solutionsfocused and can think outside of the box. All businesses now have data teams, so being able to harness this data and create insights to drive commercial decisions is key to staying one step ahead of competition.



JAMIE SMITH Senior Manager, Northern Hub



Analysis powered by

DATA & AI Salary Guide 2023

CONTACT HARNHAM UK

Got any questions about this year's Salary Guide? Please feel free to contact us.

in Harnham

OUR LONDON OFFICE MELBURY HOUSE, 51 WIMBLEDON HILL ROAD, WIMBLEDON, SW19 7QW

020 8408 6070 info@harnham.com

harnham.com

LONDON • BERLIN • SAN FRANCISCO • NEW YORK • PHOENIX • FRANCE • AMSTERDAM





Analysis powered by



DATA & AI Salary Guide 2023