

EUROPEAN
**DATA &
ANALYTICS
SALARY
GUIDE** 2021

— The definitive source of
salary information for the
European Data & Analytics market



SALARY GUIDE **CONTENTS** 2021

INTRODUCTION	8
ABOUT THIS GUIDE	11
THE NEW NORMAL	13
INDUSTRY KEY FINDINGS	15
DATA & TECHNOLOGY	18
DATA SCIENCE	26
DIGITAL ANALYTICS	34
MARKETING & INSIGHT	42
RISK ANALYTICS	50
HARNHAM CONTRACT	55
FUTURE OF THE INDUSTRY	60
CONTACT	63

10

Welcome to Harnham's 2021 Data & Analytics Salary Guide.

As ever, this guide is the result of a global survey of thousands of Data & Analytics professionals and offers an in-depth insight into the job market as it stands.

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 & Analytics.





SALARY GUIDE INTRODUCTION

A WORD FROM THE CEO

It is my pleasure to introduce you to our latest Data & Analytics Salary Guide, covering what has been one of the most unusual times the industry, and the world, has ever seen.

Over Harnham's 15 years as a business, we've seen the industry grow from a specialist area to one that is driving much of the world's conversation and innovation. While not immune to the impact of a global pandemic, this is an industry that is not only surviving, but playing a crucial role in tackling some of the world's most prescient problems, much as it did during the 2008 financial crisis.

I want to thank the 4,600+ respondents who took part this year. Your responses have provided invaluable insights into how the industry looks from the inside and, alongside an analysis of our placements over the past year and a review of job boards worldwide, have offered a clear view of where the industry is in 2021.

While the job market may have slowed early on in 2020, things are now moving incredibly quickly. Although Data & Analytics has always been a candidate's market, this is now more the case than ever before. Candidates are less willing to move, even if the right opportunity comes up (70% vs 74 last year), and we're seeing those who are on the move with a number of options at final stage, something which is, understandably, driving salaries up.

Unfortunately, when it comes to gender diversity, we seem to have reached a bit of standstill. Whilst things have moved in the right direction over the past few years, the fact that women still make up 23% of the industry (dropping slightly from 22% last year), is

a reminder that progress is slow and there is still plenty of work to be done. You can read more about this in our Diversity Report, due out later this year.

Looking to the future, it's common knowledge that the pandemic may have changed the working world permanently, and Data & Analytics is no exception. Flexible working hours and remote working options are the most sought-after benefits across the continent, and it's likely that this will dictate candidate expectations moving forward. You can read more about how the pandemic has changed the industry later in the guide under 'The New Normal'.

I hope you find our Data & Analytics Salary 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

ABOUT DAVE FARMER

As one of the founding partners of Harnham, Dave has become a recognised figure in Data & Analytics recruitment over the past 15 years.

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





ABOUT THIS GUIDE

For our 2021 Salary Guide, we have compiled data from:

- Our independent survey completed by 4,606 respondents globally.
- Analysis of all placements by Harnham Europe.
- Data from roles recruited by Harnham Europe.
- Analysis of Data & Analytics roles advertised online.

Salaries for each role have been broken down by experience level and, for this year's guide, respondents were asked to match themselves against one of the following:

Entry Level (Starting out their Data & Analytics 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 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).

Head of/Director level (Leading business units comprising of one or more technical teams).

*Entry-level salaries are not included for Contract roles due to the base level of experience required.





70%

WOULD LEAVE THEIR ROLE

If the right opportunity came up, down from 74% last year.

89%

FEEL AS OR MORE SECURE

In their role than in 2020.

15%

AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year.

10%

AVERAGE SALARY INCREASE ACHIEVED

When accepting a role over the last year.

45%

RECEIVED A BONUS

Averaging 10%, down from 17% last year.

2.5

YEARS AVERAGE LENGTH OF TIME IN A ROLE

With those in the Nordics and France, most likely to stay in the role for the longest.

22%

NUMBER OF FEMALE PROFESSIONALS

Down slightly from 23% last year.

10

YEARS AVERAGE TENURE REQUIRED

To reach Head of /Director level.

INDUSTRY KEY FINDINGS ^{EU}

TOP FIVE REASONS FOR LEAVING A ROLE LAST YEAR

- Lack of career development
- = Salary not competitive
- / Poor management
- Poor company culture
- Relocation (Personal)

TOP FIVE MOST DESIRABLE BENEFITS

- Flexible Working Hours
- Work from home
- Bonus
- Health Insurance
- Enhanced Pension Opportunities

81%

**THOUGHT THEIR COMPANY
WERE PREPARED FOR
REMOTE WORKING**

And 68% thought changes resulting from the pandemic were well communicated to them.

73%

**SAW THEIR HOURS IMPACTED
BY REMOTE WORKING**

Ranging from minor adjustments to significant alterations.

16%

**TOOK A COVID-19
RELATED PAY CUT**

Although 63% have now seen their pay return to its normal level.

8%

**AVERAGE PAY
CUT TAKEN**

As result of the pandemic, higher than the average raise seen in 2020 (5%).

32%

**HAVE AGREED A POST-
PANDEMIC REMOTE WORKING
PLAN WITH THEIR MANAGER**

41% haven't agreed a plan yet but believe their expectations will be met.

3

DAYS A WEEK

The average amount Data & Analytics professionals expect to work remotely post-pandemic.

THE NEW NORMAL

THE IMPACT OF COVID-19

If there's one subject dominating not only the Data & Analytics industry, but the entire workforce, it's what the working world will look like once the pandemic is over.

Prior to enforced socially distancing, 54% of European Data & Analytics professionals had remote working options, on average for just one day a week. Expectations are now for four days a week, although only 32% have agreed their future working plans with their line manager. 9% don't expect their manager to approve future remote working, something which could be an issue as this is now, alongside flexible working hours, a top three "most sought-after benefit".

It's unsurprising to see flexible working so sought-after now, as the majority of professionals have adjusted their working hours over the pandemic in some way, with one in five having made significant changes to their working patterns during this time.

Finally, the financial implications of the pandemic are still being felt. 16% of respondents took some form of pay cut as a result of the circumstances and 37% of those have still yet to see their pay return to normal levels. With the average cut at 8%, and the average pay increase in 2020 only 5%, there is clearly some financial uncertainty, although nearly 10% of respondents believe their pay will increase more than if the pandemic hadn't taken place.



FOCUS FRANCE



FOCUS FRANCE

The past year has seen varying levels of impact of the French Data & Analytics job market, with those in the Digital Analytics space feeling a significant impact early on.

Despite this, by the end of 2020 the market was buoyant again, while we saw continuous recruiting throughout the whole year for Data & Technology and Data Science professionals. While start-ups have continued to grow their data teams, it's the larger companies across all industries that have kept the market going as they continue to better understand the need for robust data-dedicated teams.

Businesses have adjusted well to a rapidly changing environment on the whole, being reactive with their hiring processes to ensure that they can secure top talent. Candidates have responded positively to remote working and, particularly, the decentralization of the industry outside of Paris. However, while they are keen to maintain the increased flexibility they've discovered over the past year, many are keen to get back to a social and collaborative environment as soon as possible.

INSIDER'S INSIGHT:

New expectations around remote working, the dynamics of career development and salary expectations are becoming increasingly important as we near the end of a pandemic that has mobilized the skills of Data & Analytics professionals more than ever before.

To meet this challenge, companies that want to be data-driven will have to adopt an ambitious People First strategy. This needs to include career path planning that brings talent to positions with more responsibilities, regular training courses, expert data management, and competitive salaries. Without these, businesses will struggle to retain talent.

Aurélien Magnan / Co-founder & Associate Director,
Elevate



79%

WOULD LEAVE THEIR ROLE

If the right opportunity came up, an increase from 75% last year.

79%

FEEL AS OR MORE SECURE

In their role than in 2020, the least secure in Europe.

17%

AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year.

11%

AVERAGE SALARY INCREASE ACHIEVED

When accepting a role over the last year.

60%

RECEIVED A BONUS

The most likely in Europe, averaging 10%.

62%

HAD REMOTE WORKING OPTIONS PRE-PANDEMIC

The highest percentage in Europe.

28%

NUMBER OF FEMALE PROFESSIONALS

Up from 26%, and the closest to gender parity in Europe.

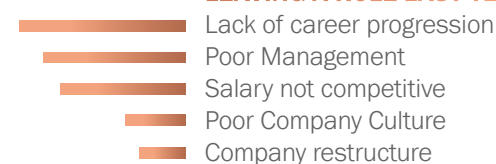
25%

SAW THEIR HOURS SIGNIFICANTLY CHANGE

As a result of the pandemic, the most in Europe.

FRANCE ^{FR} KEY FINDINGS

TOP FIVE REASONS FOR LEAVING A ROLE LAST YEAR

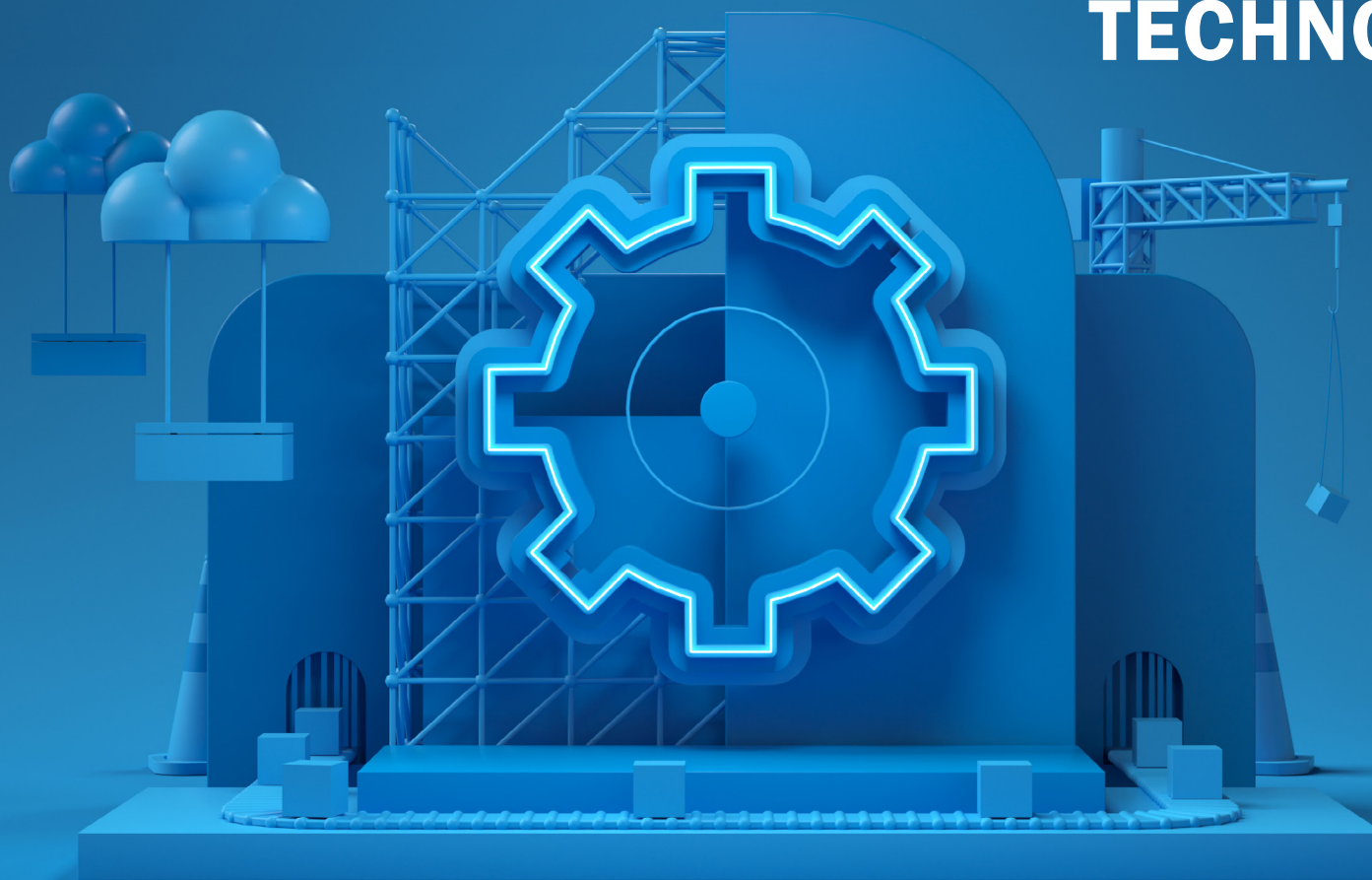


TOP FIVE MOST IMPORTANT BENEFITS





DATA & **TECHNOLOGY** ^{FR}





DATA & TECHNOLOGY FRA

While the global pandemic touched many industries, the Data & Technology space was one of the most heavily impacted, with both the job market and candidate expectations changing significantly.

Job flexibility and work/life balance are now significantly more valuable to candidates than salary is, with many prioritizing the “right environment” for their next career move. Those on the market are also keen to explore new areas, with a huge rise in demand for jobs within Health with candidates keen for their work to make a real impact.

Despite slowing down in early 2020, the Data & Technology space has seen huge investment as businesses looked to adapt to the situation for both their customers, as well as their recruitment processes. Many have been efficient at moving over to an entirely remote recruitment process, while those who haven't have been swiftly left behind. For Data Engineers, experience in Spark and Kafka remains in great demand, while Hiring Managers are also keen to architectural technologies such as Terraform and Kubernetes as well. On top of this, experience working with Cloud technologies is now essential, with many of the last companies to make the move to this type of architecture, having done so during the pandemic.



Pierre Gerbeau / Senior Recruitment Consultant



DATA SCIENCE ^{FR}





DATA SCIENCE ^{FR}

Over the past year Data Science has played a crucial role, across all industries, in establishing a new normal and preparing businesses for a post-pandemic world. Not only has this helped traditional companies keep going, but the development of new methodologies has seen further demand for Data Science skillsets in the medical, pharmaceutical and biotech sectors.

As the market continues to evolve, businesses leaders' knowledge of how Data Science can support their organizations has matured. As a result, Hiring Managers are keen to hire those with complementary skillsets, including backend skills and development experience in order to support the and collaborate better with development teams. In terms of skillsets, Python remains the most popular language by far and, interestingly, we've seen a significant drop in the popularity of R.

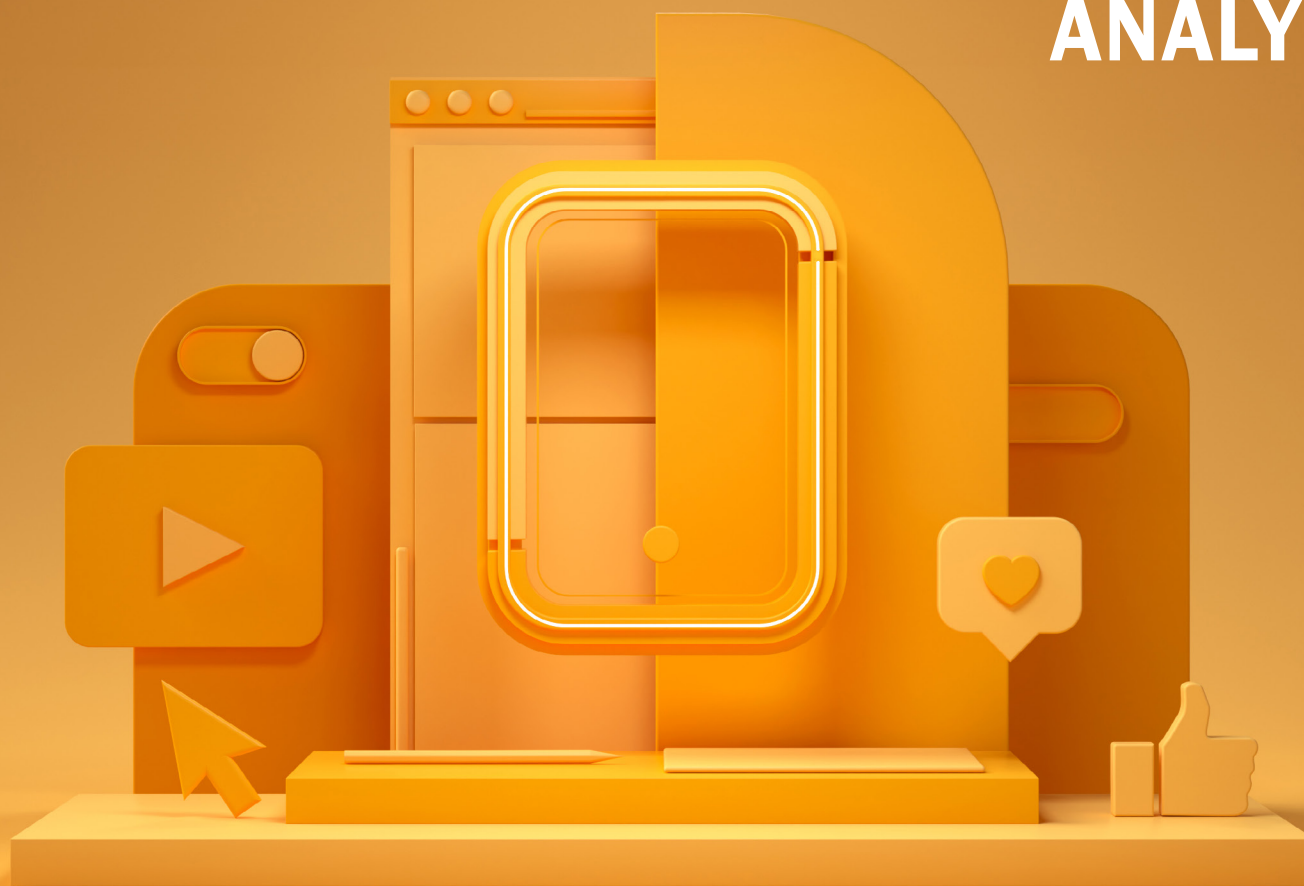


Looking forward, we're likely to see a continue rise in the popularity of MLOps technologies, with Data Scientists more included to work independently. Additionally, DevOps technologies such as Docker and Kubernetes are offering new opportunities for practitioners to put their algorithms into production in cloud environments.

Pierre Gerbeau / Senior Recruitment Consultant



DIGITAL ANALYTICS ^{FR}





DIGITAL ANALYTICS ^{FR}

While the pandemic brought about a dramatic shift in some markets, the Digital Analytics sector over the past year has seen more of a continued evolution. As a result, candidates have a pretty clear view of what they're looking for, and many are keen to gain exposure either in an agency, or in a larger client-side business.

This has become possible as a result of businesses growing out their own Digital Analytics teams, rather than just incorporating them into traditional marketing functions. However, after budget cuts led to job losses early in the pandemic, some are wary of risk and are looking closer at a business' stability before committing.



From a Hiring Manager perspective, Technical Web Analysts and CRO professionals are more in demand than ever. As a result, candidates with knowledge in BigQuery are increasingly popular and have an edge over their competitors. The most popular of all, however, remain hybrid profiles and, in particular, Data Product Management professionals are among the most sought-after in the whole industry.

Cindy Walusiak / Managing Consultant. France



PARIS

FRANCE

FR

PERMANENT - AVERAGE ANNUAL SALARY

DATA & TECH	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Business Intelligence	€ 40,000	€ 53,000	€ 65,000	€ 90,000
Data Architecture	n/a	€ 60,000	€ 80,000	€ 105,000
Data Engineer	€ 42,000	€ 55,500	€ 70,000	€ 110,000
Cloud Engineer	€ 42,000	€ 55,000	€ 70,000	€ 95,000
DevOps Engineer	€ 42,000	€ 55,000	€ 75,000	€ 100,000
Software Engineer	€ 40,000	€ 50,000	€ 70,000	€ 95,000

PERMANENT - AVERAGE ANNUAL SALARY

DATA SCIENCE	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Data Scientist	€ 42,000	€ 55,000	€ 70,000	€ 100,000
Deep Learning & AI	€ 40,000	€ 53,000	€ 65,000	€ 90,000
ML Engineer	€ 45,000	€ 60,000	€ 75,000	€ 100,000
NLP Specialist	€ 42,000	€ 58,000	€ 70,000	€ 95,000
Quantitative Analyst	€ 40,000	€ 50,000	€ 70,000	€ 110,000

DIGITAL ANALYTICS	Entry Level	Mid-Level	Technical Lead	Director
Role type				
AdTech	€ 40,000	€ 46,000	€ 60,000	€ 120,800
Conversion Rate Optimisation	€ 40,000	€ 45,000	€ 55,000	€ 65,000
Implementation	€ 40,000	€ 45,000	€ 60,000	€ 75,000
Product Management	€ 42,000	€ 51,000	€ 70,000	€ 100,000
SEA/Paid Social	€ 35,000	€ 42,000	€ 47,000	€ 57,000
SEO	€ 35,000	€ 42,000	€ 47,000	€ 55,000
Web Analytics	€ 41,000	€ 45,000	€ 52,000	€ 63,500



FOCUS GERMANY ^{DE}



FOCUS GERMANY ^{DE}

Despite the global pandemic, the German job market has continued to mature over the past year, with Hiring Manager showing a greater understanding for the need to hire quickly and correctly.

However, there has been a fair amount of organizational restructuring, particularly within tech teams and platform set ups. Many enterprises have taken the opportunity to make these significant changes over the past year, particularly if they've delayed them before.

Despite this, there is a real binary in terms of whether candidates are willing to move, with those who aren't actively seeking a new role keen to stay in their current positions for the sake of job security. This has led to a limited number of candidates on the market, with businesses who insist on German speaking candidates limiting themselves further. In addition to this, even with an increased desire for remote working, Data & Analytics professionals are keen to stay local as they anticipate a need to be close their offices in the longer term.

INSIDER'S INSIGHT:

One of the big challenges for employers is getting the salaries right. Too many companies treat specializations like any other software engineering role, but these jobs are way more specialized and demand a much higher salary. If you choose to underpay, you will have a high churn rate and a long recruitment cycle. This is most especially pronounced where you have a culture where speaking up does not result in action.

Another big trend (and prospective staff concern) in our industry is remote working. Even more than salary in many cases, I have seen engineers leaving companies or declining offers over not being able to work from home. The recent pandemic has highlighted this even more. People are more productive in quiet, comfortable home environments, they value not having to commute, spending more time with family, being able to take working vacations, and often save a ton of money not needing to own or least as many cars as a family. Companies can save on office leases, equipment, and time spent on menial office tasks.

Ryan Collins / DevSecOps/SRE Leader (@rymcol)

64%

WOULD LEAVE THEIR ROLE
If the right opportunity came up, down from 70% last year.

93%

FEEL AS OR MORE SECURE
In their role than in 2020.

20%

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

14%

AVERAGE SALARY INCREASE ACHIEVED
When accepting a role over the last year.

43%

RECEIVED A BONUS
Averaging 10%.

26%

HAD NO REMOTE OR FLEXI WORKING OPTIONS PRE-PANDEMIC
The joint highest percentage in Europe.

18%

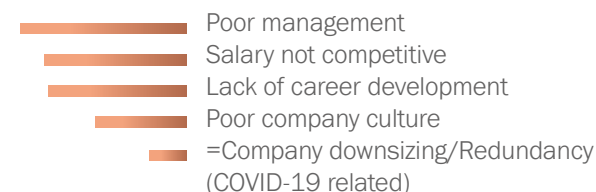
NUMBER OF FEMALE PROFESSIONALS
Down from 19%, and the furthest from gender parity in Europe.

20%

TOOK A COVID-19 RELATED PAY CUT
As a result of the pandemic, the most in Europe.

GERMANY ^{DE} KEY FINDINGS

TOP FIVE REASONS FOR LEAVING A ROLE LAST YEAR

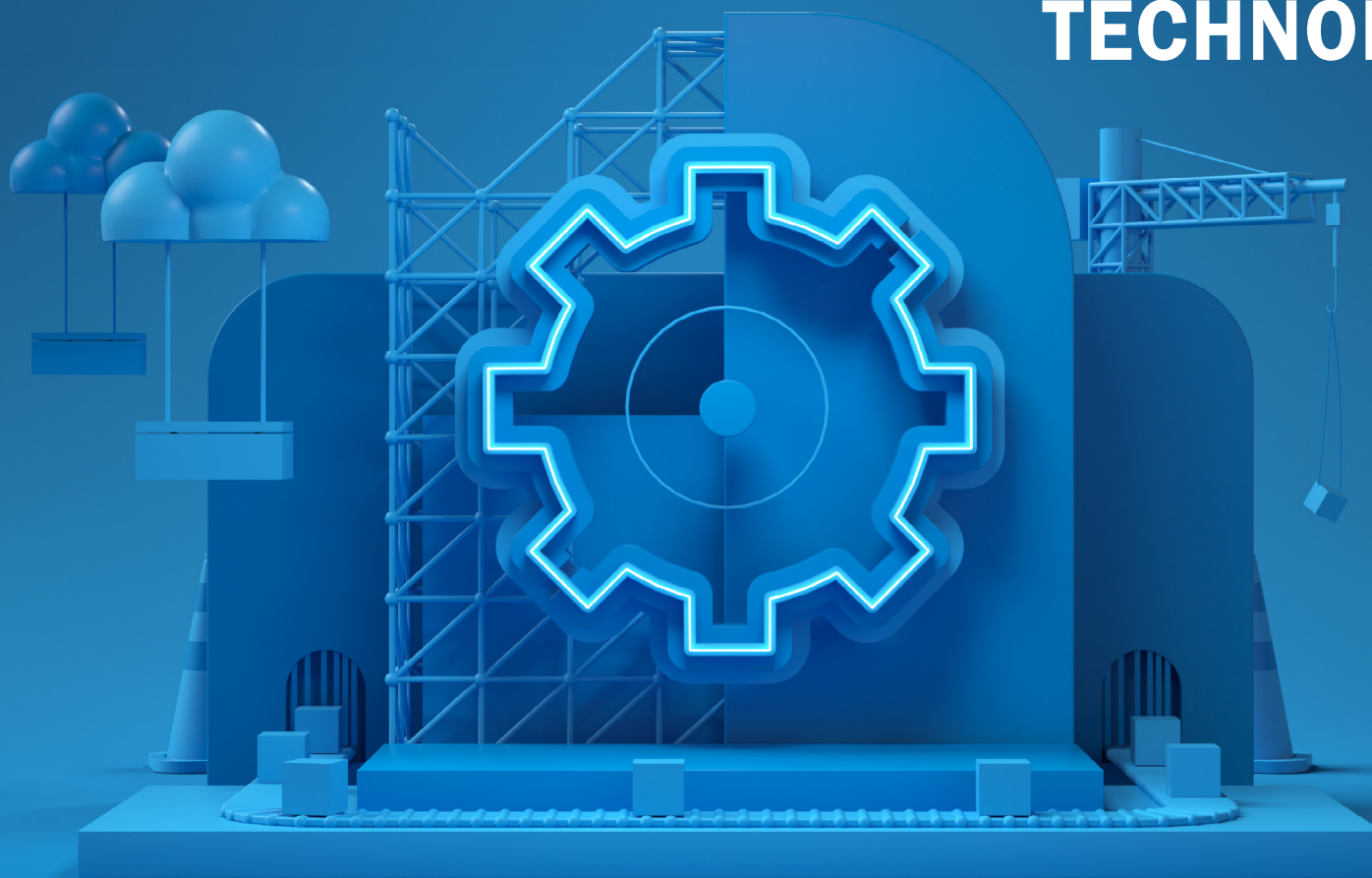


TOP FIVE MOST DESIRABLE BENEFITS

Flexible working hours
Work from home
Bonus
Education/training allowance
Health insurance



DATA & **TECHNOLOGY** ^{DE}



DATA & TECHNOLOGY ^{DE}

This past year has seen demand for quality Data Engineers continue to rise as companies have quickly tried build the platforms necessary for an increasingly data-driven world among a global pandemic.

Despite this uplift, other Data & Technology professionals found themselves harder hit early-on in the pandemic, with Software Engineer and DevOps roles drying up early in 2020. However, as of 2021, the market is once again candidate-driven and buoyant with a huge shortage of skilled professionals driving up packages and benefit offers, with candidates across all disciplines often receiving multiple offers at once.

Candidates familiar with real-time processing of data, especially within Cloud platforms, stand out among Data Engineers, especially those who have a varied background within overlapping tech-realms, such as Data Science or Machine Learning. In the world of DevOps, on the other hand, there is a high demand for those skilled in Kubernetes, AWS, and Terraform as most companies are in the process of scaling their DevOps capabilities, reducing deployment time, and increasing delivery speed.

The job market is also witnessing changing candidate expectations, with many now looking for stable companies with extremely modern tech stacks that allow for flexibility in work style, schedule, and the ability to work remotely. There has also been a change in attitudes with a new-found reluctance to leave for the sake of leaving; the opportunity to stay in a secure environment, learn additional technological tools and grow within the company is now extremely attractive. Those hiring must be quick with turnaround times and flexible with tech stacks if they are to stay ahead of the game.



Peter Schroeter / Senior Manager



DATA SCIENCE ^{DE}



DATA SCIENCE ^{DE}

After a difficult start in the German Data Science market throughout the beginning of 2021, the figure of data scientist is once again appreciated and requested among businesses.

With a remarkable increase in job opportunities for junior Data Scientists, supply now outstrips demand and, in turn, competition for top roles is at an all-time high. The most sought profile across the industry remains that of the end-to-end Data Scientist, those who have a combination of technical and soft skills, such as production experience and the ability to interact with technical and non-technical stakeholders. Furthermore, Machine Learning methods and techniques remain important components of an all-round Data Scientist's skillset.

On the other hand, a specialized knowledge of Deep Learning, Data Engineering skills, or NLP is not a must-have, but familiarity with the language and terminology surrounding these areas helps candidates stand out in an increasingly competitive Data Science market.

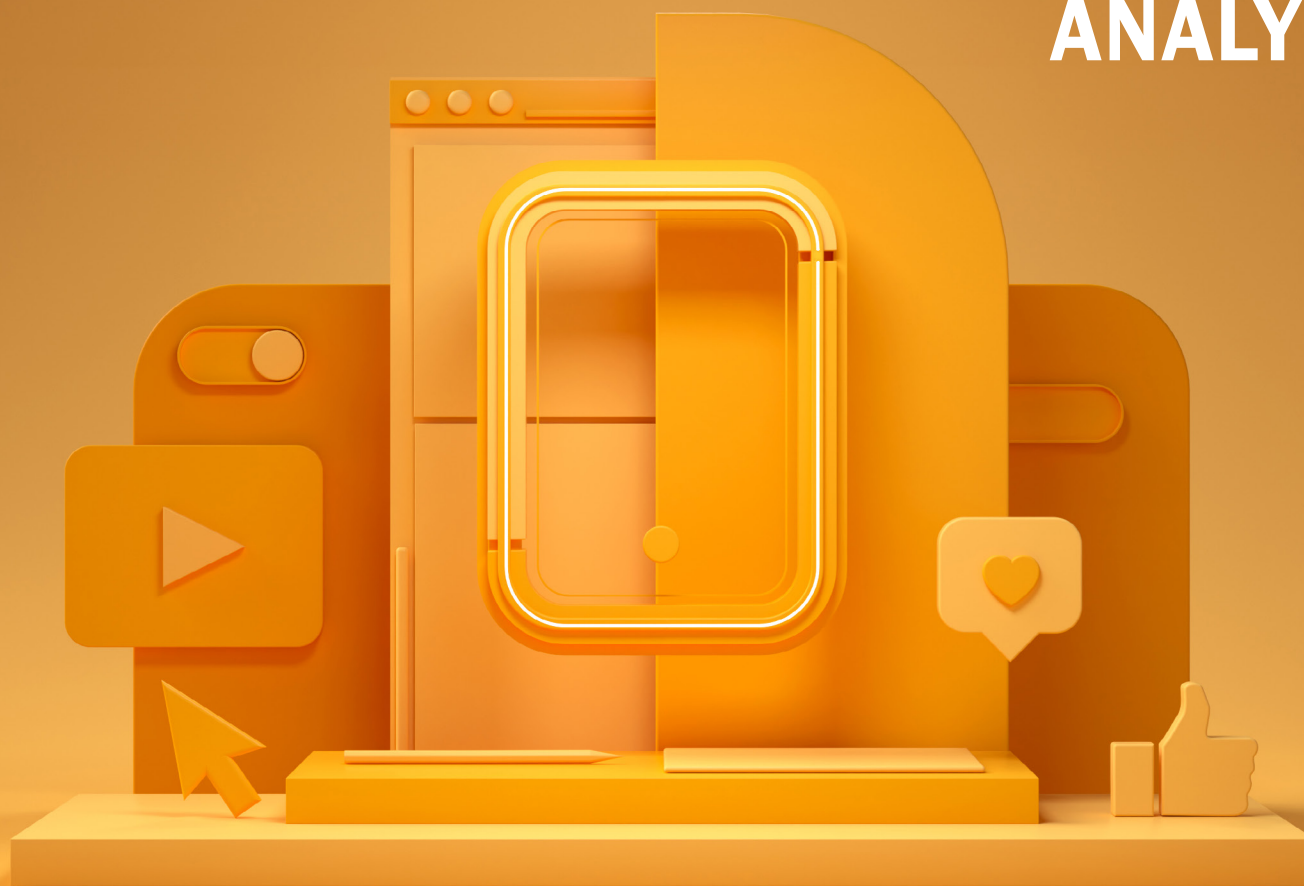
The next year will likely see AI methods increasingly integrated by Data Science teams as they look to combine knowledge of statistics and the full spectrum of techniques and information to improve data preparation, feature generation, and explainability.



Rossella Carapellese / Recruitment Consultant



DIGITAL ANALYTICS ^{DE}



DIGITAL ANALYTICS ^{DE}

While some Web Analytics roles were put on hold at the start of the pandemic, this was not universal, with Performance Marketing and Ecommerce, in particular, booming.

With businesses keen to create captivating online ad and social media campaigns in order to tempt customers to their websites, Hiring Managers sought Performance Marketeers with hands-on experience in setting up online shopping campaigns, generating leads and analyzing conversions from the first touchpoint, to the last.

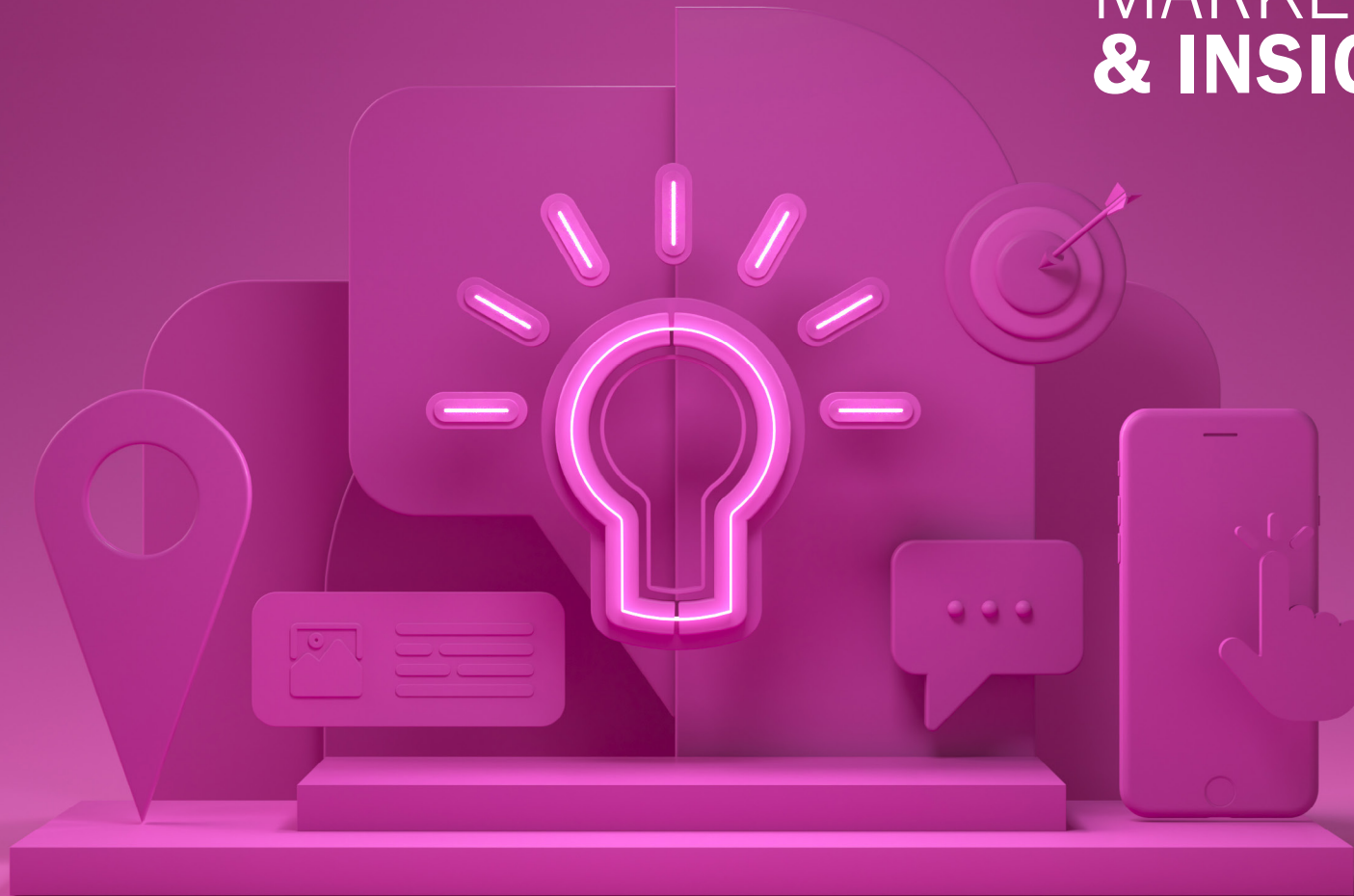
There has also been a recent resurgence in demand for Web Analysts to monitor performance trends and track web, mobile and app campaigns utilizing both Google and Adobe Analytics. Enterprises already working with Google Analytics are already in the progress of migrating to Google Analytics 4, as they look to combine their website and app insights.

In order to secure this talent though, businesses are needing to adapt. With Candidates having been working from home over the last year, they are anticipating a “new way of working” following the pandemic. In particular, an increased desire for flexible working hours and remote working is forcing companies to reshape the way they work as quickly as possible, or else risk losing out on top talent.



Peter Schroeter / Senior Manager

MARKETING & INSIGHT^{DE}





MARKETING & INSIGHT ^{DE}

After a brief slowing of the market at the beginning of the pandemic, we've seen varying rates of recovery across Marketing & Insights specialisms, reflected their levels of hiring.

Advanced Analytics, in particular Product Analytics, has seen a significant growth in demand. Senior Analysts who can predict upcoming trends are particularly sought-after, especially by those in SaaS business models, Freemiums, and FMCGs. Indeed, businesses throughout the German market are on the hunt for senior candidates in general, especially those with wide tech stacks and good analytical skills that allow them to perform complex advanced analytical procedures that help businesses stabilize and grow.

Candidates, on the other hand, are looking for roles where they can make an impact and support their companies' growth by delivering necessary data insights that lead the business in the right direction. Unsurprisingly, remote working and flexibility in future roles are high on the agenda for those looking to move, something that will likely be an ongoing trend for the next few years at least.



Dominik Probst / Recruitment Consultant

BERLIN

GERMANY

DE

PERMANENT - AVERAGE ANNUAL SALARY

DATA SCIENCE	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Data Scientist	€ 61,100	€ 75,000	€ 96,000	€ 105,000
Machine Learning Eng.	€ 55,000	€ 66,000	€ 82,000	n/a

DATA & TECHNOLOGY	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Business Intelligence	€ 52,600	€ 57,600	€ 74,000	€ 95,000
DevOps & Cloud Autom.	n/a	€ 85,000	€ 111,000	n/a
Data Engineering	n/a	€ 80,000	€ 110,000	n/a
Software Engineering	€ 50,000	€ 76,500	€ 89,500	€ 108,000

PERMANENT - AVERAGE ANNUAL SALARY

MARKETING & INSIGHT	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Campaign & CRM	€ 40,000	€ 55,000	€ 70,000	€ 80,000
Insight Analyst	€ 40,000	€ 55,000	€ 70,000	€ 80,000
Performance Marketing	€ 46,000	€ 63,000	€ 74,000	€ 86,000
Pricing Analyst	€ 48,000	€ 62,000	€ 75,000	€ 96,000

DIGITAL ANALYTICS	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Conversion Rate Optimisation	€ 45,000	€ 65,000	€ 75,000	n/a
Product Analyst	€ 50,000	€ 65,000	€ 77,000	€ 105,000
Web Analytics	€ 47,000	€ 54,000	€ 63,000	n/a



FOCUS **NETHERLANDS** ^{NDL}



FOCUS NETHERLANDS^{NDL}

The past few years have seen the Netherlands establish itself as a top location in Europe for companies looking to open offices and build out new teams.

Unsurprisingly, this has led to a huge uptick in demand for Data & Analytics talent with a wide variety of companies, both small and large, placing an emphasis on being data-driven as they move forward.

Fortunately for businesses opening up across the country, the Netherlands is a highly-desirable place to live and international candidates are willing to relocate due to the reduced language-barrier and excellent benefits on offer. However, these benefits are causing some problems for businesses looking to attract local talent, with many surprised by the extent of domestic packages that often include benefits like 13th month and holiday pay that are highly uncommon in the other regions they operate in.

INSIDER'S INSIGHT:

The data market is still characterised by two key factors; increasing salary expectations and increasing scarcity of the right mix of skills. The demand for those strong candidates means that there is more candidate focus on culture, career, training, transformation, visibility, flexibility, vision, brand etc. increasing the need for managers to really sell the role and the aspiration of the organisation; with an increasing need to be active across conferences and publications to reinforce that brand in the labour market.

For candidates to maximise this opportunity it's important to remember that the star candidate will have the blend of soft/technical skills as well as business experience. Remote working can help increase your catchment outside of the local geography but remains to be seen whether the return to the office will impact the effectiveness of this model and, longer term, I doubt managers will want a wide network of geographically isolated people rather than some local concentration (whether that is within one or many countries).

Chief Data Officer / Global Financial institution



79%

WOULD LEAVE THEIR ROLE

If the right opportunity came up, up from 70% last year.

96%

FEEL AS OR MORE SECURE

In their role than in 2020.

15%

AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year.

14%

AVERAGE SALARY INCREASE ACHIEVED

When accepting a role over the last year.

55%

RECEIVED A BONUS

Averaging 11%, slightly above the European average.

26%

HAD NO REMOTE OR FLEXI WORKING OPTIONS PRE-PANDEMIC

The joint highest percentage in Europe.

20%

NUMBER OF FEMALE PROFESSIONALS

Dropping even lower at more senior levels.

7%

TOOK A COVID-19 RELATED PAY CUT

As a result of the pandemic, the least in Europe.

NETHERLANDS

KEY FINDINGS ^{NDL}

TOP FIVE REASONS FOR LEAVING A ROLE LAST YEAR

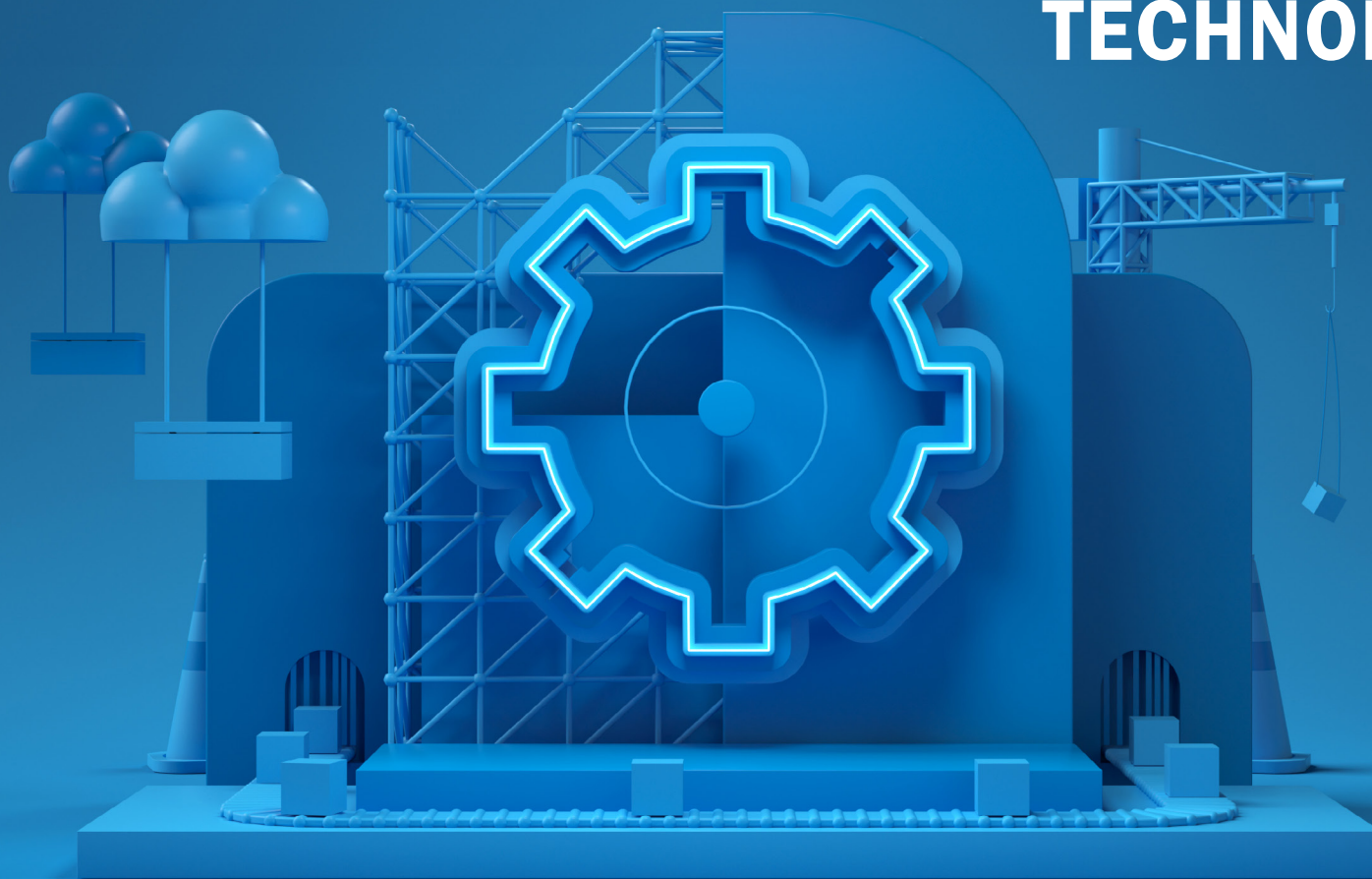
- Lack of career development
- Salary not competitive
- Relocation (personal)
- = Poor company culture / Company downsizing/Redundancy (COVID-19 related)

TOP FIVE MOST DESIRABLE BENEFITS

- Work from home
- Bonus
- Flexible working hours
- Health insurance
- = Shares/ Education/training allowance



DATA & **TECHNOLOGY** ^{NDL}



DATA & TECHNOLOGY ^{NDL}

The Data Engineering market in the Netherlands has continued its strong growth over the last year across all industries, regardless of size and sector, as businesses look to extract valuable insight and make increasingly data-driven decisions.

— This comes as many business leaders now have a better grasp on their requirements, and an understanding that they need Data Engineers to provide a solid data infrastructure to ensure that their data quality is high before it is used by Data Scientists and Analysts. Candidates looking to stand out not only need to be able to discuss their previous experience and motivations in applying for a role, but also to demonstrate their technical ability. As such, technical and coding tests remain part of interview processes, albeit generally falling in the later stages.

— For Hiring Managers, a desirable Data Engineering candidate therefore possesses not only strong coding experience in Python, or similar, but knowledge of working with public clouds as companies shift away from on-premises data storage solutions. Moreover, in the current market, companies are also looking for versatile engineers, who have exposure to a variety of different tools, with in-demand skills including a knowledge of CI/CD tooling, Machine Learning, streaming tools such as Kafka, orchestration tools like Airflow. and containerization tools like Docker.



— **Mathieu Wilken** / Recruitment Consultant



DATA SCIENCE NDL





DATA SCIENCE ^{NDL}

While early 2020 saw some industries let their talent go as a result of the pandemic, many Data Scientists took the opportunity to explore and try different sectors that were thriving at the time. This shift has meant that, now the market is recovering, some businesses are struggling to rehire top talent, particularly if they are unable to meet candidates' changing expectations around flexible and remote working.

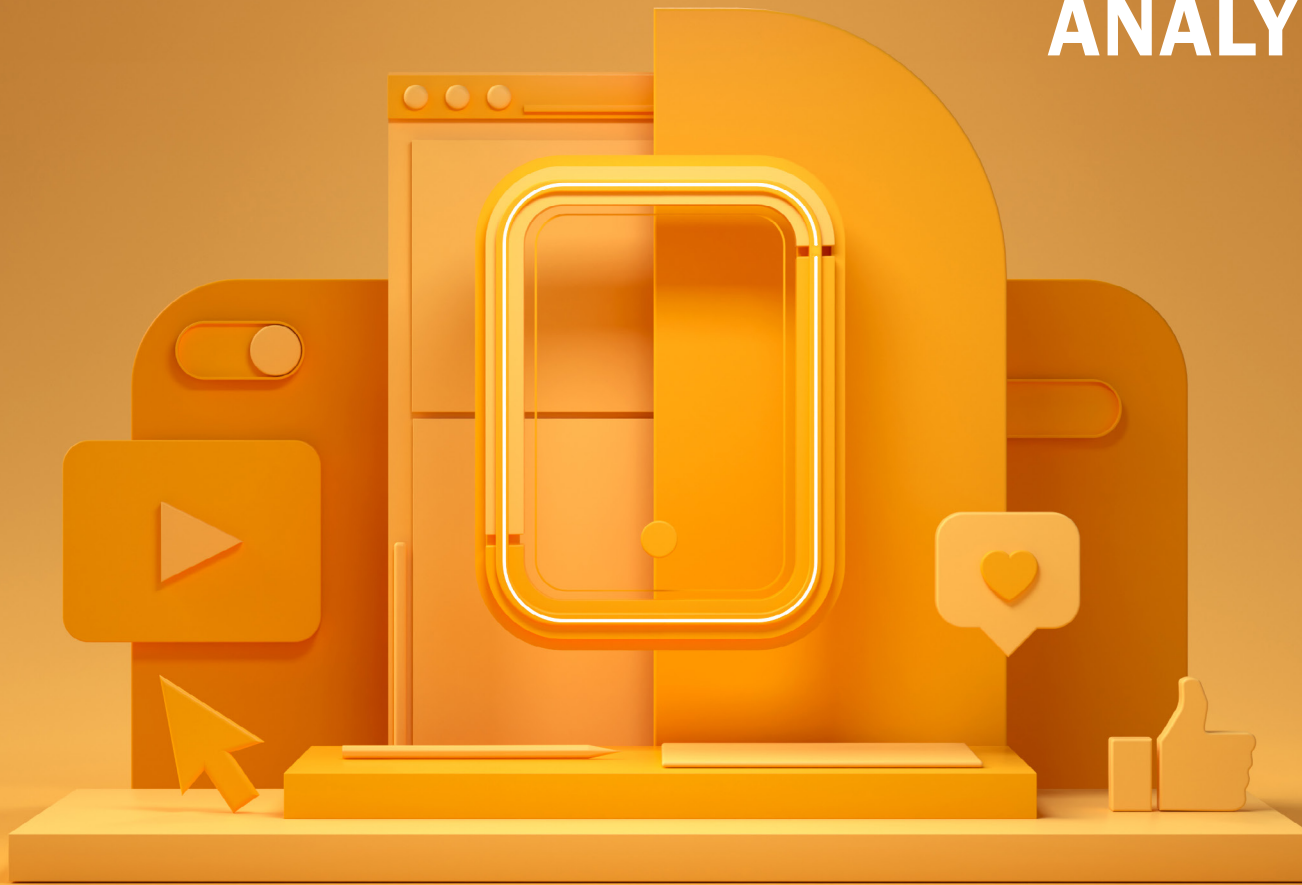
Despite this, the past year has seen the Netherlands reaffirm its status as a hub for Data Science, aided by those businesses who are willing to hire remote Data Scientists located abroad. This attitude to flexible and remote working has opened up a wider range of talent than has previously been available and those enterprises that are taking this approach are reaping the benefits.



For Hiring Managers, a proficiency in Python remains the lynchpin for any candidates looking to secure a role. However, exposure to Machine Learning applications is becoming increasingly important, with candidates with experience in classical ML methodologies, Natural Language Processing, and Computer Vision applications in high demand.

Luc Simpson-Kent, / Recruitment Consultant

DIGITAL ANALYTICS ^{NDL}





DIGITAL ANALYTICS

NDL

The effects of the global pandemic saw businesses put a greater emphasis on ecommerce and digital customer journeys which, in turn, meant significant growth in Digital Analytics teams. This has resulted in a hiring boom across the space with Digital Analysis, Conversion Rate Optimisation, Paid Media & Programmatic seeing an influx of jobs across the board.

Candidates currently on the market are keen to join growing, fast-paced companies that are thriving post-pandemic. In particular there's been a growing demand for opportunities at purely online businesses, alongside roles in healthcare technology & food delivery. After a brief period of change in early 2020, the job market is back to being candidate driven and businesses are once again willing to invest in top talent. Those who are seeing the most success offer continued flexibility with working from home moving forward.



The past 12 months have also seen a huge increase in the need for Product Analysts, with a Google Analytics360-GA and SQL/Python skill set in high demand. On top of this, there's growing demand for candidates skilled in Programmatic, Paid Search & Paid Social, in particular those with real-world experience using DV360, SA360 and a visualisation tool such as Data Studio, Tableau or PowerBI.

Ewan Dunbar / Manager

SELF-EMPLOYED FREELANCING ^{NDL}

AS WE CAN SEE, WITH 44% OF DUTCH DATA & ANALYTICS TEAMS MADE UP OF FREELANCER WORKERS, THE FREELANCE MARKET HERE IS AS STRONG AS IT'S EVER BEEN.

This has been increasingly clear over the past 12 months, supported by growing demand for remote working and international hiring. With remote working now the norm, businesses are seizing on the opportunity to tap into international talent pools and broaden the range of professionals available to them.



Despite this, the desire and need for highly skilled Dutch speakers remains a requirement for many businesses, and those can speak the native tongue will always have an edge over their fellow candidates.

Dan Lewis / Associate Director

78%

**RECEIVED AN EXTENSION TO
THEIR LATEST CONTRACT**

With an average extension
of 18 weeks.

27%

**RECEIVED A
RATE INCREASE**

Increasing 6%
on average.

41%

**AVERAGE % OF TEAM
WHO ARE FREELANCERS**

From teams who already have
at least one freelancer in.

44%

**OFFERED A PERMANENT
POSITION AT THE END OF
THEIR CONTRACT**

With 50% seeing their pay
unchanged after accepting.

AMSTERDAM

NETHERLANDS

FR BNL

PERMANENT - AVERAGE ANNUAL SALARY

DATA SCIENCE	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Computer Vision Specialist	€ 46,000	€ 65,000	€ 75,000	€ 110,000
Data Scientist	€ 47,000	€ 65,000	€ 83,000	€ 105,000
Deep Learning & AI	€ 46,600	€ 66,000	€ 80,000	€ 100,000
ML Engineer	€ 50,000	€ 67,000	€ 82,000	€ 100,000
NLP Specialist	€ 48,000	€ 67,000	€ 85,000	€ 105,000

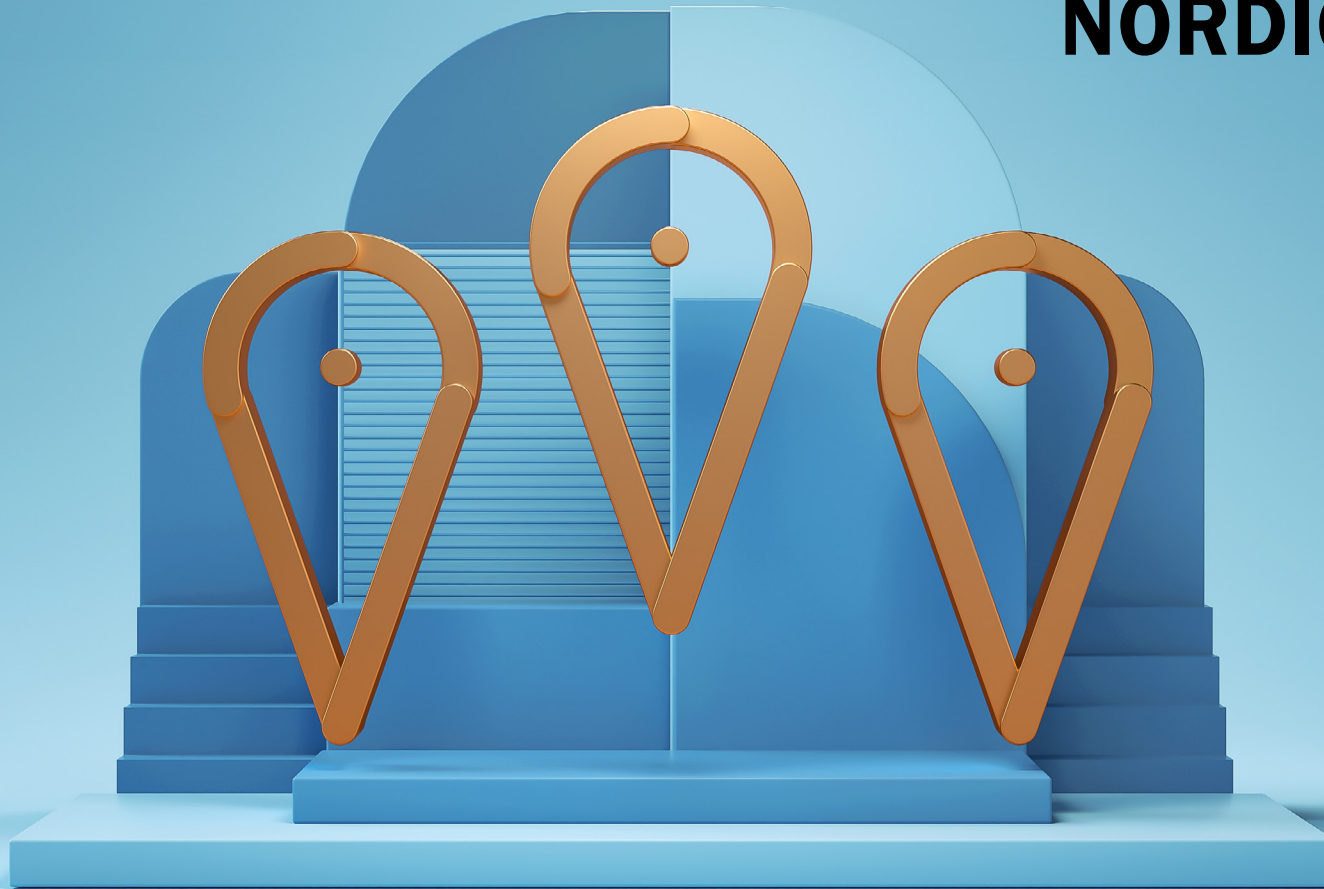
DATA & TECHNOLOGY	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Business Intelligence	€ 40,000	€ 55,000	€ 75,000	€ 98,000
Data Engineering	€ 43,000	€ 60,000	€ 90,000	€ 120,000

PERMANENT - AVERAGE ANNUAL SALARY

MARKETING & INSIGHT	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Campaign & CRM	€ 30,000	€ 47,000	€ 65,000	n/a
Performance Marketing	€ 30,000	€ 50,000	€ 70,000	€95,110

DIGITAL ANALYTICS	Entry Level	Mid-Level	Technical Lead	Director
Role type				
AdTech	€ 30,000	€ 50,000	€ 65,000	€ 80,000
Conversion Rate Optimisation	€ 40,000	€ 55,000	€ 75,000	€ 90,000
Product Analyst	€ 45,000	€ 65,000	€ 90,000	€ 117,500
Programmatic	€ 35,000	€ 50,000	€ 65,000	€ 85,000
SEA/Paid Social	€ 30,000	€ 35,000	€ 50,000	€ 70,000
SEO	€ 40,000	€ 57,000	€ 67,000	€ 75,000
Web Analytics	€ 36,000	€ 46,500	€ 58,500	€ 87,500

FOCUS **NORDICS**



FOCUS NORDICS

Whether as a result of different governmental responses, or as a result of long-standing flexible working policies, the Nordics have been less impacted by the pandemic than their neighbors.

Many professionals have still been working in the office, at least part-time, and this has resulted in the region feeling closer to business as usual than the rest of the continent. Perhaps this is why respondents from the Nordics want to work from home for the fewest days in Europe once the pandemic is over, suggesting that their famed work/life balance is not purely dictated by remote working.

However, while employers are known for their strength in these areas, many are now reluctant to meet candidates' financial expectations. When this is added to the fact that candidates, especially those at bigger firms, are less willing to move and put their job security at risk, top talent is harder to come by than it has been for a while now.

INSIDER'S INSIGHT:

Whilst the majority of the world now have new expectations around flexible and remote working following the pandemic, existing flexibility in the Nordics has meant that the transition was relatively straightforward when the restrictions first came in.

This has meant that professionals haven't needed to worry as much about the implications of a 'new normal', or a lack of home set up, and have therefore been able to continue to concentrate on supporting their customers through the use of Data & Analytics as their landscape dramatically changed and worry set in.

Head of Risk/ Data Consultancy



67%

WOULD LEAVE THEIR ROLE

If the right opportunity came up, down from 70% last year.

91%

FEEL AS OR MORE SECURE

In their role than in 2020.

15%

AVERAGE SALARY INCREASE SOUGHT

When applying to a role over the last year.

10%

AVERAGE SALARY INCREASE ACHIEVED

When accepting a role over the last year.

37%

RECEIVED A BONUS

Averaging 11%, slightly above the European average.

61%

HAD FLEXI WORKING OPTIONS PRE-PANDEMIC

The highest percentage in Europe.

21%

NUMBER OF FEMALE PROFESSIONALS

Dropping even lower at more senior levels.

2.5

DAYS A WEEK

The average amount Nordic professionals expect to work remotely post-pandemic, the lowest in Europe.

NORDICS KEY FINDINGS^{NDX}

TOP FIVE REASONS FOR LEAVING A ROLE LAST YEAR

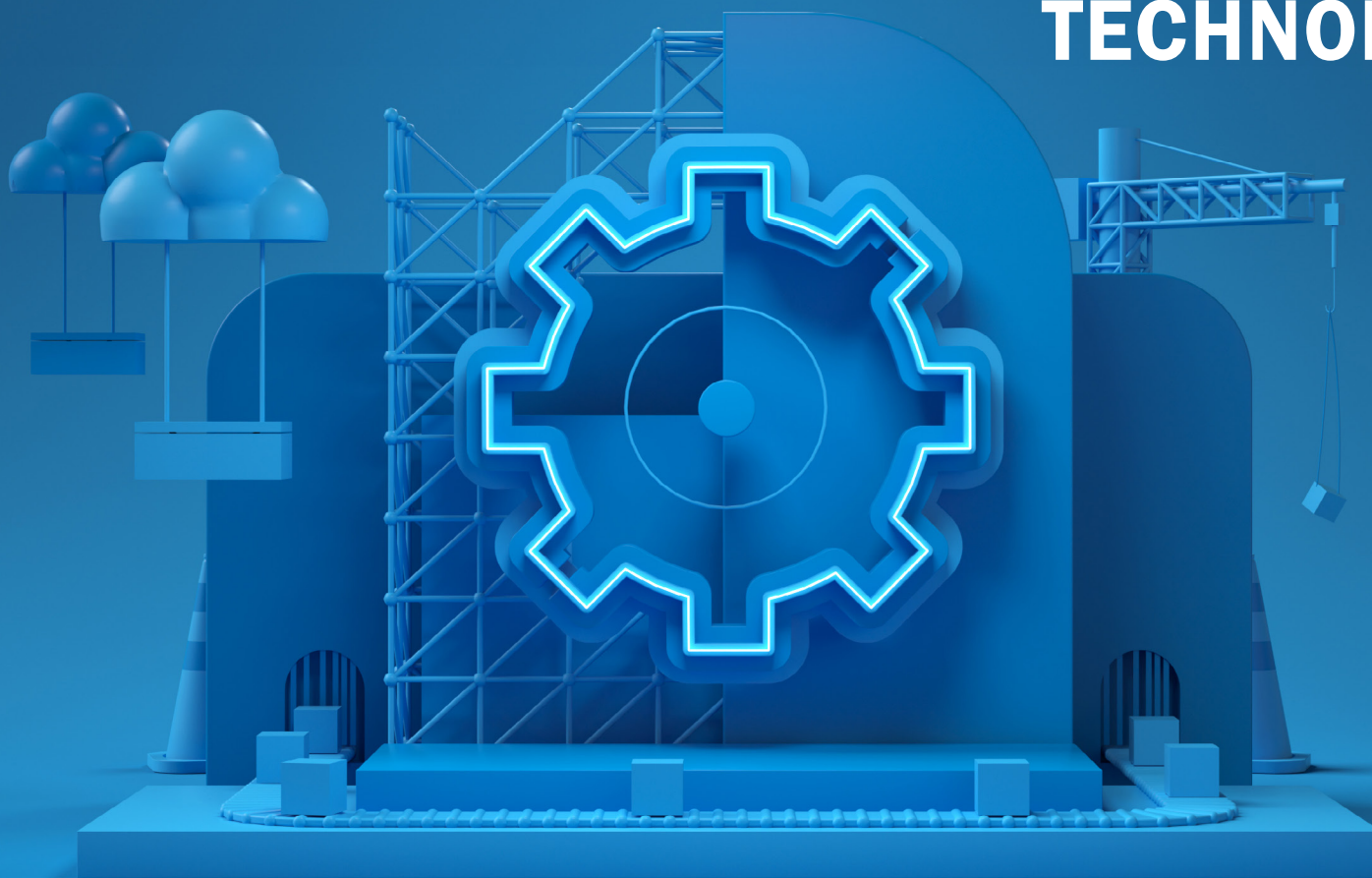
- Lack of career development
- Salary not competitive
- Poor management
- Poor company culture
- Company restructure / Job stability

TOP FIVE MOST DESIRABLE BENEFITS

- Flexible working hours
- Work from home
- Bonus
- Health insurance
- Enhanced pension contributions



DATA & **TECHNOLOGY** ^{NDX}





DATA & TECHNOLOGY ^{NDX}

The Nordic Data & Technology job market was at a standstill for a few months early on in the pandemic, with many of the biggest companies freezing hiring while the dust settled. Smaller companies, however, used this time to try and secure any top talent that was on the market at the time, and take advantage of a less competitive marketplace.

The Data & Technology space remains one of the most challenging specialism to attract top talent in, with few candidates and a lot of competition with businesses fully coming to understand the need for a solid infrastructure. Companies are particularly interested in candidates with big data skills, coupled with experience in, and an understanding of, DevOps.



Organizations in the Nordics who are looking to secure top talent need to be flexible with location and language, with those able to relocate candidates having a significant advantage.

Elise Myhren / Managing Consultant

DATA SCIENCE ^{NDX}





DATA SCIENCE NDX

While some roles struggled with investment and opportunity during the early stages of the pandemic, Data Scientists remained in high demand. Playing a pivotal role in dealing with the changing environment and planning to the future, Data Scientists were there to gain insights into customer behaviors, optimize supply chains, and continually update forecasts.

Those most in demand have a strong technical background along with a solid business acumen, the most crucial ingredients for a well-rounded Data Scientist. Having a high level of understanding of the challenges an organization may be facing is even more crucial in a post-pandemic world and is a key skill for those looking to stand out.

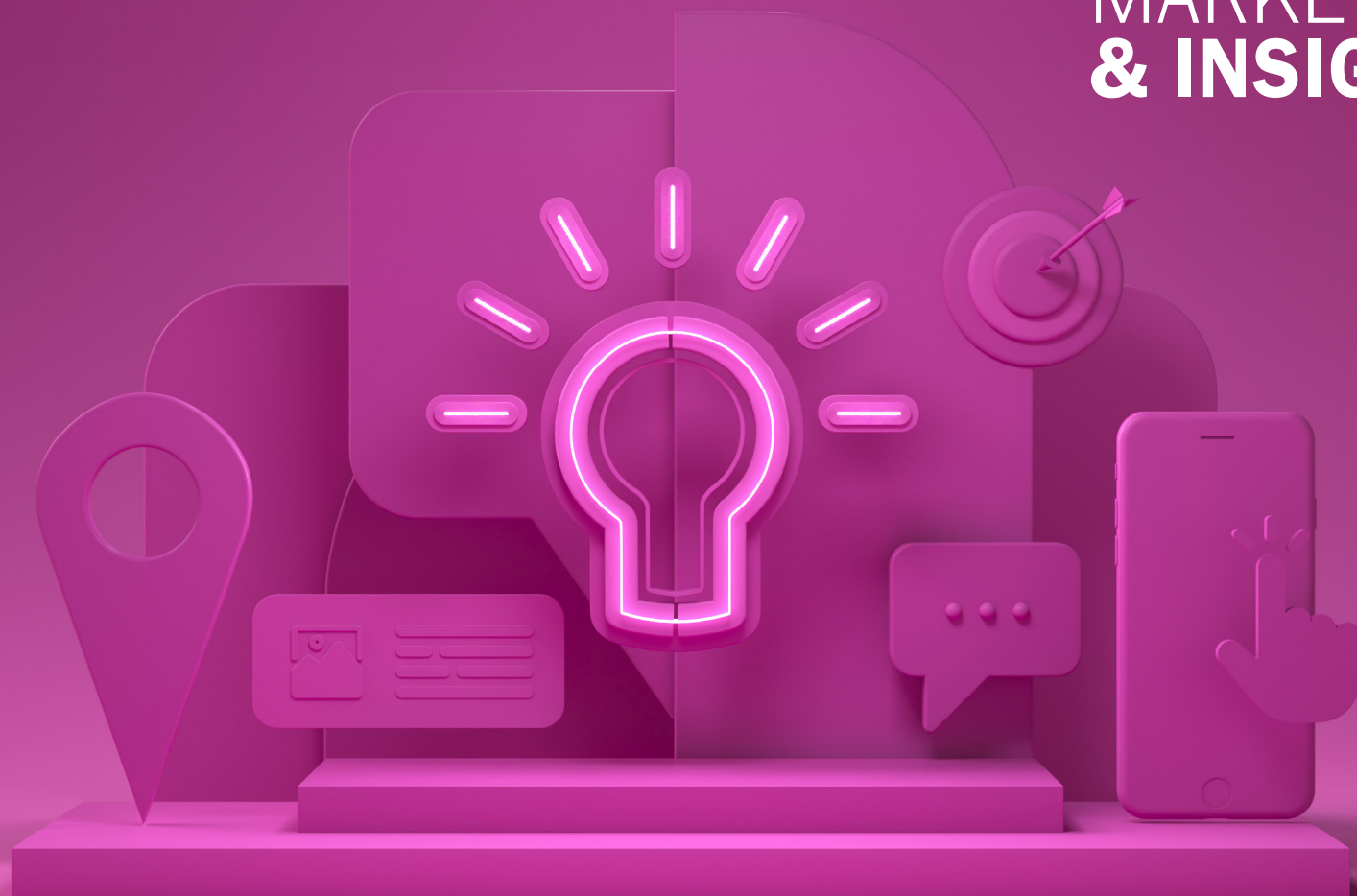


On the candidate side, Data Scientists are, first and foremost, looking for a company with a suitable infrastructure in place that allows them to get real value out of the data available and create worthwhile AI.

Elise Myhren, / Managing Consultant



MARKETING & INSIGHT^{NDX}



MARKETING & INSIGHT ^{DE}

The past year has been particularly challenging for the Nordics Marketing & Insight market, with the space one of the hardest hit by the pandemic. Businesses limited their investment in this area, leaving many candidates out of work, and on the market for new roles. Fortunately, the tide has turned, and the job market has become increasingly busy once again.

With customers pushed out of their normal routines by social distancing, they adapted new habits and behaviors. As a result, it is now essential for businesses to utilize data to derive insights and gain an in-depth understanding of customer behavior that will allow them to make more targeted business decisions and ultimately create mutually profitable relationships.

As ever, there is a high demand for candidates with a combination of analytical skills, technical know-how and digital marketing experience. Marketing automation and targeted communication continue to play important roles in marketing strategy and initiatives with candidates who nail the technical as well as strategic perspective of the Marketing & Insight space clearly standing out. Knowledge of Salesforce Marketing Cloud and Pardot, Dynamics 365, HubSpot, Braze, Voyado or similar tools continue to be sought after in candidates, as well as proficiency in SQL and Python and analytics tools such as Google Analytics.



Amanda Snellman / Recruitment Consultant



RISK ANALYTICS^{NDX}





RISK ANALYTICS ^{NDX}

As with 2019, 2020 was the year of Credit Risk Modellers, particularly across the big banks and Consultancies. With many lenders looking at upgrading their IRB Models alongside implementing IFRS9 models, demand for technical Credit Risk professionals has shown no sign of slowing down.

Unsurprisingly, it's been an interesting year for lenders, with the need to reset their risk appetite, as a result of the pandemic, to determine what they can and cannot lend. However, recent signs suggest that lending levels are getting back to where they once were pre-pandemic and collections have remained consistent through government incentives offered to those who lost their job or could not work for one reason or another.

As has long been the case, SAS is still the predominant tool among Risk Analysts. However, Python use is still on the increase with strong SQL becoming an important part of analyst's skillset. We are also seeing more frequent requests for advanced technical skills, such as Machine Learning capabilities, as banks look to make their models more robust, innovative and effective.



Ewan Dunbar/Manager

COPENHAGEN

DENMARK

NDX

PERMANENT - AVERAGE ANNUAL SALARY

DATA SCIENCE	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Data Scientist	DKK 500000	DKK 580000	DKK 732000	DKK 1300000
Deep Learning & AI	DKK 500000	DKK 550000	DKK 700000	DKK 1200000
ML Engineer	DKK 520000	DKK 650000	DKK 840000	DKK 1200000
NLP Specialist	DKK 490000	DKK 570000	DKK 690000	DKK 897000

DATA & TECHNOLOGY	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Business Intelligence	DKK 490000	DKK 510000	DKK 680000	DKK 1164000
Data Engineer	DKK 500000	DKK 670000	DKK 854000	DKK 1100000
Cloud Engineer	DKK 500000	DKK 610000	DKK 790000	DKK 1560000

PERMANENT - AVERAGE ANNUAL SALARY

DIGITAL ANALYTICS	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Conversion Rate Optimisation	DKK 410,000	DKK 526,000	DKK 675,000	DKK 830,000
Implementation	DKK 418,000	DKK 530,000	DKK 682,000	DKK 840,000
Product Analyst	DKK 423,000	DKK 542,000	DKK 690,000	DKK 855,000
Web Analytics	DKK 420,000	DKK 540,000	DKK 685,000	DKK 850,000

MARKETING & INSIGHT	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Campaign and CRM	DKK 400,000	DKK 530,000	DKK 650,000	DKK 838,000
Insight Analyst	DKK 408,000	DKK 535,000	DKK 658,000	DKK 844,000

HELSINKI FINLAND

NDX

PERMANENT - AVERAGE ANNUAL SALARY

DATA SCIENCE	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Data Scientist	€ 51,000	€ 58,000	€ 73,000	€ 95,000
Deep Learning & AI	€ 50,000	€ 56,000	€ 71,000	€ 90,000
ML Engineer	€ 54,000	€ 60,000	€ 76,000	€ 92,000
NLP Specialist	€ 51,000	€ 60,000	€ 72,000	€ 89,000

DATA & TECHNOLOGY	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Business Intelligence	€ 49,000	€ 63,000	€ 74,000	€ 93,000
Data Engineer	€ 50,000	€ 63,000	€ 76,000	€ 92,000
Cloud Engineer	€ 51,000	€ 61,000	€ 74,500	€ 84,000

PERMANENT - AVERAGE ANNUAL SALARY

DIGITAL ANALYTICS	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Conversion Rate Optimisation	€ 38,000	€ 45,500	€ 60,000	€ 79,000
Implementation	€ 40,000	€ 48,000	€ 62,000	€ 83,000
Product Analyst	€ 43,000	€ 50,000	€ 65,500	€ 86,500
Web Analytics	€ 39,000	€ 47,000	€ 62,000	€ 82,000

MARKETING & INSIGHT	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Campaign and CRM	€ 33,000	€ 43,500	€ 59,000	€ 79,000
Insight Analyst	€ 33,500	€ 45,000	€ 61,000	€ 82,000

OSLO

NORWAY

NDX

PERMANENT - AVERAGE ANNUAL SALARY

DATA SCIENCE	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Data Scientist	NOK 540000	NOK 710000	NOK 864758	NOK 1250000
Deep Learning & AI	NOK 51000	NOK 670000	NOK 861000	NOK 1200000
ML Engineer	NOK 550 000	NOK 750000	NOK 950000	NOK 1300000
NLP Specialist	NOK 540000	NOK 740000	NOK 940000	NOK 1250000

DATA & TECHNOLOGY	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Business Intelligence	NOK 520000	NOK 690000	NOK 850000	NOK 961000
Data Engineer	NOK 550000	NOK 750000	NOK 900000	NOK 1260000
Cloud Engineer	NOK 540000	NOK 730000	NOK 890000	NOK 1200000

PERMANENT - AVERAGE ANNUAL SALARY

DIGITAL ANALYTICS	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Conversion Rate Optimisation	NOK 458000	NOK 585000	NOK 730000	NOK 995000
Implementation	NOK 469000	NOK 580000	NOK 715000	NOK 990000
Product Analyst	NOK 475000	NOK 596000	NOK 745000	NOK 1100000
Web Analytics	NOK 456000	NOK 586000	NOK 732000	NOK 1050000

MARKETING & INSIGHT	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Campaign and CRM	NOK 430000	NOK 645000	NOK 875000	NOK 1070000
Insight Analyst	NOK 448000	NOK 649000	NOK 869000	NOK 1000000

RISK ANALYTICS	Entry Level	Mid-Level	Technical Lead	Director
Role type				
Portfolio Management	NOK 440,000	NOK 650000	NOK 800,000	NOK 1,050,000
Decision Science	NOK 450,000	NOK 675000	NOK 850,000	NOK 1,100,000

STOCKHOLM SWEDEN NDX

PERMANENT - AVERAGE ANNUAL SALARY

DATA SCIENCE Role type	Entry Level	Mid-Level	Technical Lead	Director
Data Scientist	SEK 495000	SEK 620112	SEK 649500	SEK 870000
Deep Learning & AI	SEK 500000	SEK 550000	SEK 670000	SEK 900000
ML Engineer	SEK 550000	SEK 650000	SEK 740000	SEK 950000
NLP Specialist	SEK 540000	SEK 640000	SEK 730000	SEK 940000
DATA & TECHNOLOGY Role type	Entry Level	Mid-Level	Technical Lead	Director
Business Intelligence	SEK 510000	SEK 502000	SEK 762000	SEK 1080000
Data Engineer	SEK 500000	SEK 684000	SEK 780000	SEK 1200000
Cloud Engineer	SEK 490000	SEK 610000	SEK 750000	SEK 1200000

PERMANENT - AVERAGE ANNUAL SALARY

DIGITAL ANALYTICS Role type	Entry Level	Mid-Level	Technical Lead	Director
Conversion Rate Optimisation	SEK 400000	SEK 512000	SEK 670000	SEK 830000
Implementation	SEK 407000	SEK 515000	SEK 662000	SEK 845000
Product Analyst	SEK 430000	SEK 558000	SEK 700000	SEK 920000
Web Analytics	SEK 405000	SEK 500000	SEK 660000	SEK 810000
MARKETING & INSIGHT Role type	Entry Level	Mid-Level	Technical Lead	Director
Campaign and CRM	SEK 425000	SEK 550000	SEK 660000	SEK 880000
Insight Analyst	SEK 452000	SEK 560000	SEK 675000	SEK 915000
RISK ANALYTICS Role type	Entry Level	Mid-Level	Technical Lead	Director
Portfolio Management	SEK 475,000	SEK 660,000	SEK 825,000	SEK 1,100,000
Decision Science	SEK 480,000	SEK 675,000	SEK 875,000	SEK 1,200,000



CONTACT HARNHAM^{EU}

We hope you've found our commentary on the state of the Data & Analytics market interesting.

Should you wish to ask for further information about any of the figures or markets referenced in this guide, please feel free to give us a call.

Beyond finding your next hire or next role, please feel free to get in touch if you need any support from Harnham.

You can reach us via any of the following channels:

 @HarnhamData  harnham

OUR LONDON OFFICE

MELBURY HOUSE, 51 WIMBLEDON HILL ROAD,
WIMBLEDON, SW19 7QW
+44 20 8408 6070
harnhameurope@harnham.com

OUR BERLIN OFFICE

HARNHAM GMBH
WARSCHAUER PL. 11-13
10245 BERLIN
+49 30 217 899 21
deutschlandinfo@harnham.com
harnham.com

LONDON - BERLIN - SAN FRANCISCO - NEW YORK

For further information on our
services, or if you have any
questions on the content of our
Salary Guide, please contact us

harnham.com