



# 66

Everything is going to be connected to cloud and data.

#### - Satya Nadella



### Introduction

Data Engineers create and translate digital algorithms into prototype code and maintain, organise, and identify developing trends and patterns in large data sets. Their set of skills and experience generally include SQL database design, drafting process documentation, and exceptional written and verbal communication skills.

They may also need to be familiar with prevalent computer programming languages such as Python, Kafka, Java, Hive, or Storm to analyse real-time business metric accumulation, data warehousing and querying, data management and schema along with related tasks.

## **Average Salary of Data Engineers in the UK**

£50,800

Website	Average Salary	Data Source
www.payscale.com	£40,324	Based on <b>353</b> Responses
www.reed.co.uk	£53,693	Based on <b>2,605</b> job postings
www.indeed.co.uk	£60,445	Based on <b>3,900</b> reported salaries
www.glassdoor.co.uk	£45,000	Based on <b>259</b> reported salaries
uk.talent.com	£55,000	Based on <b>20,827</b> reported salaries



# 9,000+

Data Engineering jobs currently listed on LinkedIn UK



# **Average Salary Based on Region**

City	Average Salary	Current Vacancies
London	£66,000	3,400+
Cambridge	£62,000	350+
Birmingham	£54,000	300+
Manchester	£53,000	500+
Reading	£62,000	500+
Bristol	£52,000	350+
Nottingham	£55,000	200+
Leeds	£48,000	200+

<sup>\*</sup>Salaries have been rounded off to the nearest ooo

We mapped average regional salaries of Data Engineers collected from separate data sources which you can see in the chart below.



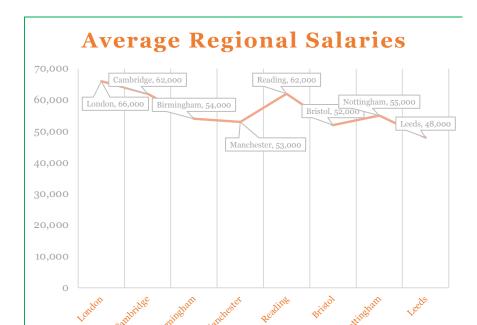
#### **Career Paths**

- Technical Architect
- Product Support Specialist
- Data Analyst

#### **Popular Skills**

- Python
- SQL
- ETL (Extract, Transform, Load)
- Apache Spark
- Data Analysis





Based on the average salary data collected from different sources, it is quite evident that London is the most lucrative job market for Data Engineers with Reading and Cambridge being the close second.

It is important to note that the considerable difference in statistics related to average salaries of Data Engineers demonstrate variation based on a number of factors including the number of responses /reports, experience, region, required skillset, and technical competence.

Another key factor that contributed to the variation in salaries is experience level of Data Engineers. Increment in salary with work experience is not an unusual expectation regardless of the industry but in Data Engineering field, it was observed that a candidate can see a growth of 33% to 70% in a short period of 4 to 8 years.



Data is the new science. Big data holds the answers - Pat Gelsinger



#### Demand for Data Engineers in the UK

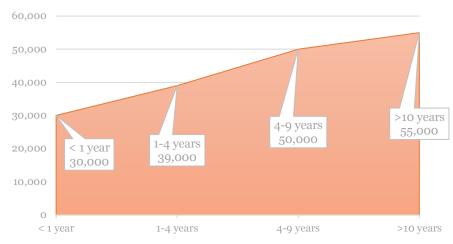
During the last **6 months**, the demand for Data Engineers grew substantially in **top 17 job locations** in the UK including Scotland, Yorkshire, Northern Ireland, and Wales.

Due to COVID-19 pandemic, demand for remote and work from home Data Engineers also saw a major increase.



While an entry level Data Engineer with only a year of experience is expected to make close to £30,000, the same Engineer is predicted to earn nearly £40,000 in 2 to 4 years. If he or she continues to gain experience, in the next 1 to 4 years, the average salary gets closer to the £50,000 mark - 32% more than average UK income.

#### Data Engineers - Average Salary Based On Experience



# Year on Year Comparison of Data Engineering Job Market

The leading IT industry observer in the UK, IT Jobs Watch reported a ranking promotion of 99 positions with Data Engineering making it to the top 200 most desired skillset in the country. In 2018, Data Engineering ranked 387 which improved to 289 in 2019. The ranking has now made another jump to 190.

While the number of job postings related to Data Engineering declined by 30% year on year in 2020, it should be kept in mind that it still made for 1.81% of all permanent jobs advertised in the UK - up from 1.12% and 0.82% of 2019 and 2018 respectively.



Data Engineers

Process raw data

Function behind the scenes

Build infrastructure to consolidate and enrich numerous data sets

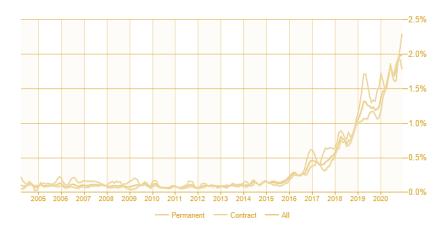
Handle large-scale data processing

Monitor and maintain systems

Prepare data for analysis

This aligns with the fact that the job market shrunk as a whole due to the pandemic with an overwhelming number of businesses reducing their overhead.

#### **Data Engineers – Job Vacancy Trend**



In the last 3 years, the job vacancy trend for permanent Data Engineer positions has seen a 200% growth with the percentage increasing from 0.5% in 2018 to 1.5% in the mid of 2020. It means that despite the shrunken job market, Data Engineering vacancies have continued to grow at a rapid pace.

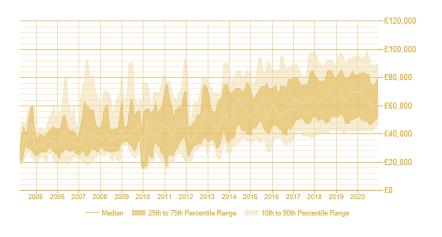
While the market for Data Engineering professionals grew, the salary trend is highly indicative of employers and businesses attempting to cut their operational expenses during the pandemic-ridden year. Average salary of Data Engineers plateaued overall with some regions even witnessing a minor decline.

The frozen average salary highlights that while there is a huge and growing market for Data Engineers, employers are currently searching for entry to intermediate level or part time professionals to keep their costs in check.





Data Engineering is the fastest growing technology occupation with **50% YoY growth** in global demand. Most companies are now looking to double their Data Engineering headcount.



## **Conclusion**

While the COVID-19 pandemic has impacted the UK economy including Data Engineering job market, it is crucial to note that the negative shift has only translated into salary trend being plateaued while the number of job vacancies seeing immense growth year over year.

Data Engineering remains one of the most lucrative IT fields with an intermediate skill and experience level professional earning close to £50,000.