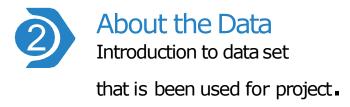
HR PROJECT

CONTENTS







Insights to find?

What are the objectives and insights that are to be found out?



Various steps used for data cleaning process.



Visual analytics

Different visuals and summaries to understand data well.



Dashboard view

The view of dashboard that is been created

1 ABOUT THE PROJECT

ABOUT PROJECT

Every company has an HR Department which deals with various recruitment and placement related work of the company. Here in this project we have a huge data set in from which we are going to extract insights which can be useful for HR department to work on and to gain knowledge about the recruitment process of the market. We have extracted many different insights which we will observe further in the report.

2 ABOUT THE DATA

ABOUT DATA SET

The dataset is about the job details data for analytics industry. The companies in the dataset are Hong Kong based companies. Data consist of various job description for various analytics job roles like Data Scientist, Data analyst, Business Intelligence, Machine Learning Engineer, Data Engineer. The Dashboard made at the end is for the HR Team of a company.

DETAILS OF DATASET

1 JC The

JOB TITLE

The Job Title column contains the name of the jobs given by a particular company.

2

COMPANY

The Company column contains the name of the companies who are providing different types of jobs.

3

SALARY

The Salary column contains the salary for various job roles. Salary column has many null values as many companies do not reveal their salaries publicly.

4

JOB DESCRIPTION

The Job Description column contains the detailed description of the job given by particular companies providing the jobs.



CAREER LEVEL

The column contains various career levels like Entry Level, middle level, senior level. based on number of years of experience.

DETAILS OF DATASET

6

QUALIFICATION

The Qualification column contains various educational qualification an individual need for a job for example degree, graduation, post graduation, etc.

7

YEARS OF EXPERIENCE

The Years of Experience column contains the minimum eligibility in terms of experience of years for various job roles

8

JOB TYPE

The Job Type column contains the type of jobs required for example full time, internship, part time, contract, etc.

9

COMPANY WEBSITE

In the company website there are various website links where an individual can apply.

10

INDUSTRY

The Industry column is the domain to which a particular job role belongs for example Finance, HR, IT, etc.

DETAILS OF DATASET



SEARCH TERM

The Search Term is the column which contains various analytics domain job belongs to for example Data Science, Data Analytics, BI, ML, etc.



DATE POSTED

The Date posted column contains the date when a particular job was posted.



DATE SCRAPPED

The Date scrapped column contains the date when the particular dataset was scrapped from some recruitment websites..

INSIGHTS TO FIND OUT?

INSIGHTS TO BE FOUND?

- 1 What are total number of jobs available?
- What are total number of companies providing jobs?
- What are total jobs for various domains?
- What are various career level and it's distribution across various jobs?
- What are distribution of jobs across various analytics fields?

INSIGHTS TO BE FOUND?

- Which company is providing highest number of jobs?
- Which domain has the highest number of jobs?
- What are minimum required qualification for job roles?
- What are various job types for different job titles?
- Which are TOP 5 companies with highest jobs?

INSIGHTS TO BE FOUND?

- Which Company has the highest number of jobs for each Career Level?
- Which Industry has the highest number of jobs for each Career Level?
- Which Company has the highest number of jobs for each analytics fields?
- Which Industry has the highest number of jobs for each analytics fields?
- what is the total number of jobs for analytics fields grouped by career level?

STEPS FOR CLEANING DATA

1. REMOVING UNECESSARY COLUMNS

- REMOVING LOWER SALARY RANGE & UPPER SALARY RANGE
 The column is of no use hence we can replace the columns using remove column option of Power BI.
- REMOVING DATE SOURCE COLUMN
 The column is of no use hence we can replace the columns using remove column option of Power BI.

2. CHANGING DATA TYPES



CHANGING DATA TYPE OF YEAR OF EXPERIENCE

The column was having a string data type hence we can change it to whole number using change data type option.

2

CHANGING DATA TYPE OF DATE COLUMNS

The data formats were in string type hence we have changed it to date type using change data type option

3. REPLACING VALUES



REPLACING VALUES IN EXPERIENCE COLUMN

The Experience table was having a value -1 which was suppose to be 1 so changed the value -1 to 1 using Replace Value option.



REPLACING VALUE IN QUALIFICATION COLUMN

The Qualification column has two qualification name Non-Degree Tertiary and Non Degree Tertiary so we can replace Non Degree Tertiary with Non-Degree Tertiary as they represent same qualification.

5 VISUAL ANALYTICS AND FINDINGS

SUMMARY OF DATA

Total number of jobs

3211

Total companies

1223

Total industry

51

There are different jobs available and various companies and industries. The summary below shows the Total summaries.

SUMMARY OF DATA

Total Career Level

3

Total analytics field

5

Total Job Types

41

There are various job titles similarly there are various Career level, various fields of job and various job types which is been shown below.

COMPANY AND DOMAIN WITH HIGHEST NUMBER OF JOBS



IT Solutions Limited is the company with highest number of Job Titles. With 25 jobs.



Human Resources Management/Consultancy is the domain with highest number of jobs, with 777 different jobs.

TOP 5 COMPANIES AND TOTAL JOBS

RANK	NAME OF THE COMPANIES	TOTAL JOBS
1	IT Solutions Limited	43
2	Robert Walters (HK)	40
3	Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI)	37
4	Manpower Services (Hong Kong) Limited	31
5	Talent Fields Hong Kong Company Limited	29
5	Pinpoint Asia Limited	29

CAREER LEVEL

Total Career Level

3

Career level is the type of job work you are going to get according to years of experience you have.

There are three types of Career Level that are:



Entry level jobs are the job level for fresher's or people entering a new domain.

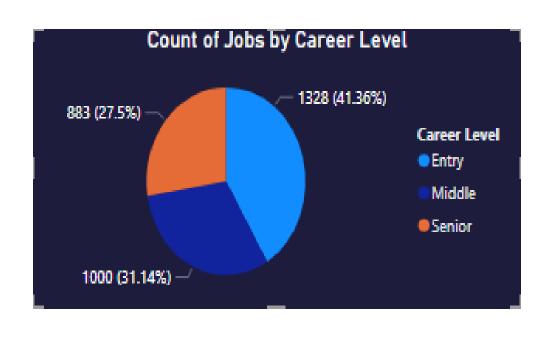
1 Middle Level Jobs

Middle level jobs are the job level for the people with some years of experience in a particular domain.

1 Senior Level Jobs

Senior Level jobs are the job level for the people who have many years of experience in particular domain and they can work for higher job post like manager, etc.

VARIOUS JOB TYPES FOR DIFFERENT JOB TITLES

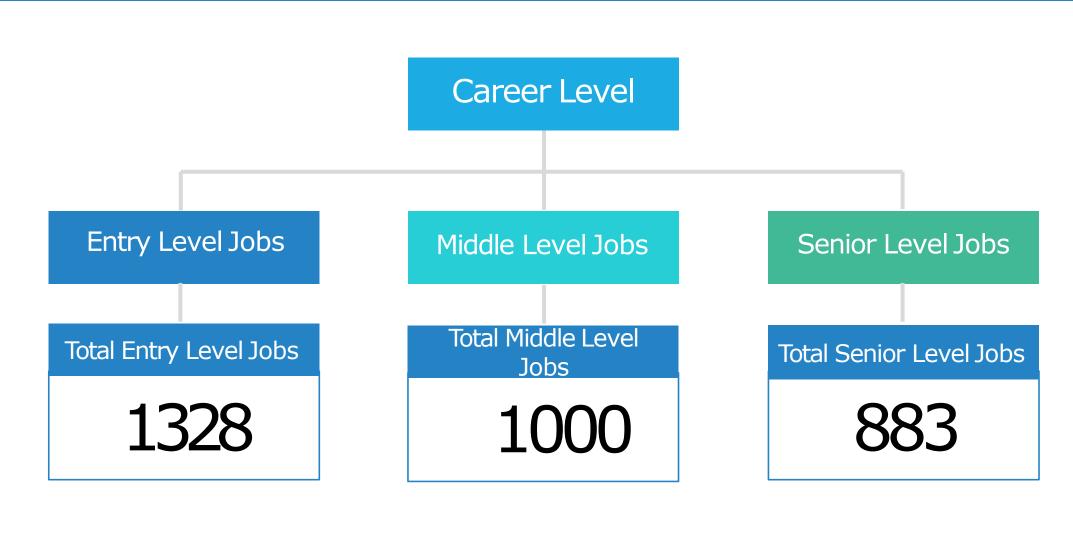


KEY INSIGHTS

There are various career level according to requirement of the job. Career level depends upon the years of experience of anindividual.

According to the visual Entry Level Jobs have the highest shares with 41.36 % of job share. Middle Level Jobs shares 31.14 %. Senior Level Jobs has 27.5%.

VARIOUS JOB TYPES FOR DIFFERENT JOB TITLES



ENTRY LEVEL JOBS

- Company with highest number of Entry Level job is Talent Fields Hong Kong Company Limited, with 21 Entry Level Jobs.
- Information Technology industry has highest number of Entry Level job, with 373 entry level jobs.

MIDDLE LEVEL JOBS

- Company with highest number of Middle Level job is IT Solutions Limited., with 23 Middle Level Jobs.
- Human Resources Management/Consultancy industry has highest number of Middle Level job, with 275 Middle level jobs.

SENIOR LEVEL JOBS

- Company with highest number of Senior Level job is Hong Kong Applied Science and Technology Research Institute Company Limited (ASTRI), with 5 Senior Level Jobs.
- Human Resources Management/Consultancy industry has highest number of Senior Level job, with 271 Senior level jobs.

JOB ROLES LEVEL

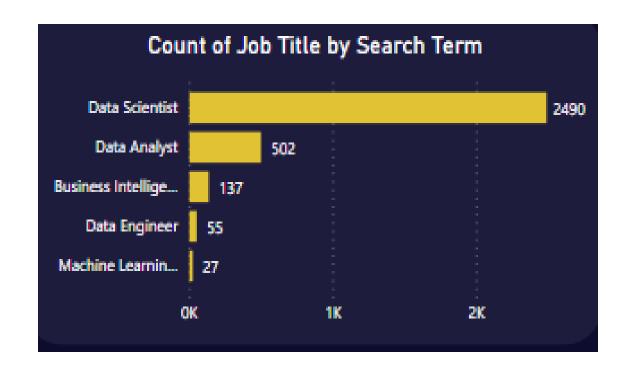
Total Analytics field

5

There are five types of analytics fields that are:

- Data Scientist Jobs
- 2 Data Analyst Jobs
- 3 Data Engineer Jobs
- 4 Business Intelligence Jobs
- Machine Learning Engineer Jobs

JOB ROLE ANALYSIS



KEY INSIGHTS

From the above graph we can observe that the **Data Scientist** has highest number of job roles with **2490jobs** and **Machine Learning Engineer** has least that is **27 jobs**. Second highest is **data analyst** with **502 job roles**. **Business Intelligence and Data Engineer** are close with **137** and **55** job roles.

Data Science 2490

Data Analyst

502

BI

137

Data Engineer

55

ML Engineer

27

COMPANY WISEINSIGHTS



IT solutions Limited is the highest job opening in data science role with 37 jobs.



Protivi Hong Kong is the highest in data analyst role with 12 jobs.



Many industries has only single job requirement in data engineer job role.



Many industries has only single job requirement in data engineer job role.



Many industries has only single job requirement in business intelligence job role.

KEY INSIGHTS

Most of the companies prefer Data Scientist and Data analyst jobs because rest of the job roles are covered in both the job roles

DOMAIN WISE INSIGHTS



Information Technology domain is the highest which has 625 job opening in data science job role.



Human Resources/Consultancy domain is the highest which has 137job opening in data analyst job role.



Information Technology domain is the highest which has 17job opening in data engineer job role.



Information Technology domain is the highest which has 9 job opening in machine learning engineer role.



Human Resources/Consultancy domain is the highest which has 22 job opening in business intelligence role.

ENTRY LEVEL WISEINSIGHTS



Data Scientist has 1033 entry level jobs.



Data Analyst has 214 entry level jobs



Data Engineering has 22 entry level jobs



Machine Learning Engineering has 8 entry level jobs.



Business Intelligence has 51 entry level jobs.

MIDDLE LEVEL WISEINSIGHTS



Data Scientist has 785 middle level jobs.



Data Analyst has 147 middle level jobs.



Data Engineering has 18 middle level jobs.



Machine Learning Engineering has 12middle level jobs.



Business Intelligence has 38 middle level jobs.

SENIOR LEVEL WISEINSIGHTS



Data Scientist has 672 senior level jobs.



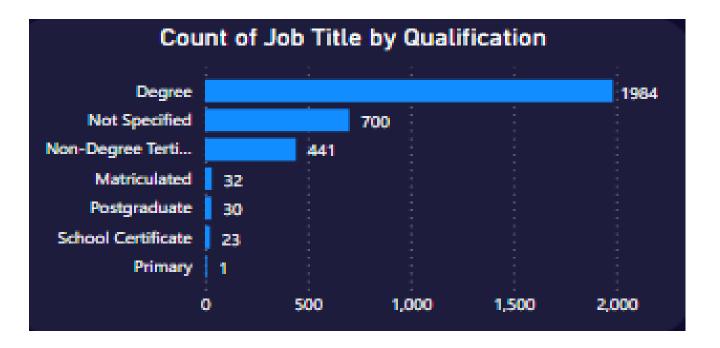
Data Analyst has 141 senior level jobs.



Business Intelligence has 48 senior level jobs, followed by Data Engineer having 15 and Machine Learning Engineer having 7 jobs respectively.

REQUIRED QUALIFICATION FOR JOBS

Many people takes a degree or post graduation degree for jobs. Lets study the distribution of various companies across various qualification.



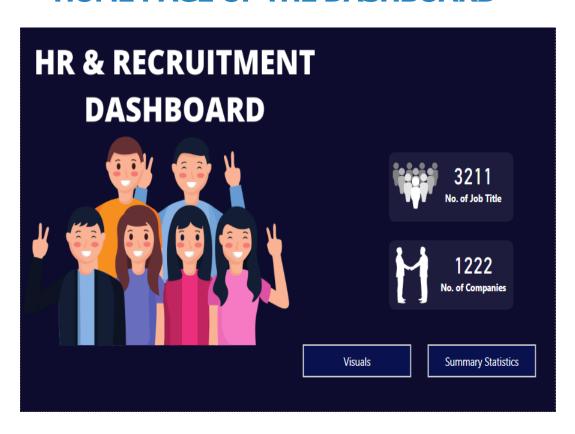
KEY INSIGHTS

From the above visual we can observe that the more companies require a Degree for various roles. Comparison to Non-Degree its not even half of the Degree. There are also other qualification involved such as Matriculated, Post Graduation and School Certificates.

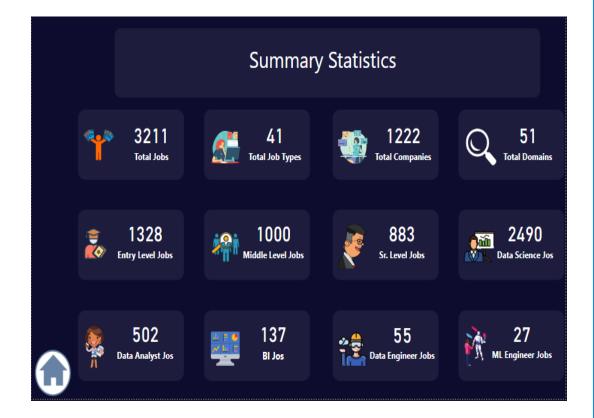
6 DASHBOARD

DASHBOARD PAGES VIEW

HOME PAGE OF THE DASHBOARD



SUMMARY STATISTICS PAGE





PRESENTATION BY: Elsayed Metwaly