# **Global Job Market Insights: A Power BI Dashboard Analysis**

## **1. Introduction**

As the job market is constantly changing with time, it is impossible to ignore that the understanding of the present market trends as well as the needs are very crucial to job seekers, employers and policymakers. This report uses job post data from LinkedIn to produce insights into the global labour markets using various simple Power BI dashboards. The approach as well is going to use Power BI’s suggestion into what people are doing to publish these insights and look at the trends in the different areas concerning the skills required, how they are paid, the appropriate currency and type of jobs,

Information that leads to the strategic decision making for recruitment, education and human resource development among others is given in this report through the analysis frame, methodology and summary of the findings and recommendations for the same.

# **2. Project Purpose and Objectives**

The main objective of this initiative is to investigate the dominant trends affecting the world’s labour market by leveraging informative tools. With the help of our investigation, we strive to:

**Help in** **career decisions by assisting in the identification of high-demand skills**, as well as **profitable job occupations**.

**Strengthen human resource strategies while determining the wage trends and appropriate human resources with a clear job focus.**

**Aid institutions to provide programs to their students in ways that enable them to be able to work effectively in high-growing activities.**

**The biggest aim is to understand the current trends in job postings as they relate to adjustment strategies.**

**Key Objectives**

    Know the skills that are in demand both in various industries and in different parts of the world.

    Investigate levels of job remuneration by sector based on the type of pay structure such as annual, hourly and the distribution of the pay.

    Determine how the labour markets are treated by line managers with respect to the most common informal type of employment i.e. permanent

# **3. Research Questions**

The research addresses the under-mentioned inquiry issues:

**1) Primarily, which know-how attracts the most attention in world job offers?**

        Such recognition is advantageous for career advancement as well as job placement in firms that help guide talents to useful places.

**2) Where are the most job openings structured in terms of pay and what are the pay - rates in the most job openings in terms of the currencies similar or contrasting?**

        The discussion elaborates benefits about how salaries are structured based on geography and economy also providing useful insights with salary survey as well as hiring forecasts in compensation and benefits management.

**3) Finally, what is the most common work type whether full-time, part-time or as a contractor in various regions?**

        When Work-type distribution data is apparent, it allows both the companies and staff to have an effective strategy for meeting both short and long-term workforce needs.

# **4. Metrics and KPIs**

Through the period of the analysis and to achieve the aforementioned strategic goals, we developed the key performance indicators (KPIs) as follows.

    As the number of job adverts rises which is also referred to as market potential, it is obvious that the potential is reshaped according to the number of advertised job opportunities which implies the total amount of applications that contend study is one.

**The average salary** quoted in job adverts in a certain area over a certain period, so as to draw a comparison with other regions or sectors.

**Breakdown of Skills Demand**: Wide variety of skills as stated in job adverts and the visualization of it all in order to see any movement in talent acquisition.

**Currency Distribution**: Looking at different currencies, reveals the strengths of the job market in different regions.

**Pay Scale Distribution**: Shows the kind of pay scales used in various positions- yearly, hourly, or monthly, for example.

**Work Type Distribution**: The percentage of full-time, part-time, contract, and temporary posts in the job market.

# **5. Data Model and Methodology:**

The data model used in the proposal allows for filtering and displaying information in a variety of ways.

**a. Job Title and Description**: These convey the nature of the job, required skills, qualifications for employment and location.

**b. Salary Information**: This provides the figures for the salary, the terms of salary payment, (e.g. annual or hourly wage) and the currency used.

**c. Work Type**: This section helps in categorizing the jobs, such as full-time and part-time jobs, contract work and so on.

**d. Geographic Data**: This section provides data on the location of the job postings, thereby facilitating mapping and regional trend analysis.

We have harnessed the power of publicly available job posting data and augmented reality (AR)using Power BI. The functionality of Power BI is interactive, this implies that it is easy to do real-time filtering depending on the skills, types of jobs and also geographical areas making it possible to answer exploratory questions that were not previously pre-defined.

# **6. Key Findings**

**6.1 Skills in Demand**

As we pursued our analysis the following were the trends in global skills demand:

**Top Skills:**

Sitting at the top of the chart is the business skills. Management (MGMT) and Information Technology (IT) are the most in-demand skills which is a clear indication of how important leadership and tech experts are these days. In this order: Sales, Manufacturing, and Healthcare do not take up a lot of time and show a good balance of compromise in where the demand for human labour is.

**Emerging Skills:**

Perhaps of most interest are engineering, finance and marketing skills, which all have significant demand and point to an underlying scarcity of persons who have the relevant skills.

**6.2 Compensation Structures and Currency Distribution**

**Currency Usage:**

‘After sorting through the different pieces of information and looking at how skills and education determine the adoption of different practices in all countries the United States (USD) emerges as the standard currency in job posting. Needless to say, claims may only be made after noting that the dollar is ‘where it’s supposed to be’. A job in the United States is still one of the most lucrative jobs, despite having the current global job opportunities in abundance.’

There are other currencies that are used in the jobs’ descriptions, these include the Euro (EUR) in Europe, and the Canadian Dollar (CAD) in Canada, which indicates that people are also working in those regions.

**Wage Systems:**

        Of all positions, a significant portion (57.18%) is reported to have yearly salaries implying a preference for regular multipresent employment relations.

        40.86% of positions are hourly paid implying that the labour market is developed and permits short-term employment contracts

**6.3 Distribution of Work Type**

**Full-Time Dominance:**

        The majority of the positions listed in the report are full-time, and this is consistent with the growing need for long-term employment opportunities within the labour market.

**Contract and Part-Time Roles:**

        The third most common category behind Freelance jobs includes but not limited to position with firms on an hourly basis.

        While part-time jobs also exist within the market, there are numerous full-time opportunities attesting to the dominance of full-time positions within the existing job market.

# **7. Final Notes and Suggestions**

The analysis provides an array of vital points regarding the transformation of the employment sector worldwide.

* **Demand for Specialized Talent:** The significance of management and IT-related skills in today’s job market is undeniable. Therefore, it is crucial for job applicants to develop and enhance these skills in order to compete effectively.
* **Geographical Concentration of the Job Market**: The percentage of job posts in USD and North America shows that there is a lot of activity within this market. Nonetheless, there are more opportunities in Europe and Canada, which makes these regions quite popular with international job seekers and companies planning for expansion.
* **Changes and Expectation of Compensation**: With the statistics available showing that more than half of the jobs apply an annual salary while the rest are mainly contract and part-time jobs, companies still offer full-time employment. Some companies will consider flexible work arrangements in recruiting talent who are more interested in short-term engagement.
* **Strategic Talent Acquisition**: In order to enhance the workforce of the organization, the company must increase its investment in information technology, management and sales training. Another point is the remuneration structure should conform to both permanent as well as competitive hourly rates in the case of those on contracts.

We believe that with the publication of the given project on GitHub, we are going to create a helpful platform that would enable professionals to understand better the way the current labour market is structured and assess their decision-making process.

# Appendix

A close-up of a graph

Description automatically generated

This dashboard on Power BI consolidates information on job postings and is most likely linked to LinkedIn. These are the basic sections included in the dashboard:

**Total Jobs Posted:**

A sum of about 123.85k postings can be assumed to be the total of all advertised roles.

**Average Salary:**

The average salary that reflects the mid offering with respect to all those jobs is about 91.94k.

**Most Wanted Skills (Donut Chart):**

Percentage distribution of most wanted skills is shown in the chart:

IT: 16.44%

SALE (Sales): 14.14%

MGMT (Management): 13.12%

MNFC (Manufacturing): 11.44%

HCPR (Healthcare): 8.99%

BD (Business Development): 8.18%

ENG (Engineering): 7.93%

OTHR (Other) 5.37%

**Top 5 Industries (Pie Chart):**

In this part of the pie the industries to which most jobs posted belong are shown:

The lion's share of the jobs comes in Staffing and Recruitment as an industry.

Other industries heavily occupied by job posts are IT Services, Hospitals and Healthcare, Software Development, and Financial Services.

**Companies Hiring:**

One of the visuals in the dashboard in a tree map is made of the companies with the most jobs posted. Some of these big companies are.

The Job Network

Lowe’s

Ingersoll

J. Galt

Liberty Healthcare and Rehabilitation Services

Capital One among others.

**Job Postings by City (Map Depiction):**

A world map is there to show where employment opportunities are and lots of jobs are shown in North America, Europe and some parts of Asia.

**Filters:**

There are two filters in the dashboard, one in Location and another one in Job title, that can help the user filter the displayed data based on a specific location, and let the user show data to certain job titles.

This dashboard allows for a quick understanding of the job market dynamics, the skills in demand at the moment, the hottest sectors in which the services of potential employees are sought after, and the key companies that have openings.

A close-up of a graph

Description automatically generated

The Power BI interface featured on this page was designed to provide an overview of certain aspects of job advertising and recruitment with a particular focus on the job market; such aspects include but are not limited to the latest job vacancies, the changes in job related skills and techniques and many more. Here are the highlights of the lessons available.

**Notes on Using a Particular Currency in Job Adverts:**

A graphical representation in the form of a bar chart is provided on the usage of the top most used currency in job advertisements.

Incidentally, USD (US Dollars) seems to be highly predominant, then EUR (Euros) coming in next, followed by CAD (Canadian Dollars) so on and so forth to BBD, and followed by GBP (British Pounds).

This gives an implication that the bulk of job advertisements are probably those for jobs that are in the US or have something to do with the United States.

**Most Requested Skills:**

There are many areas of concern in the workforce with much more emphasis on the skills required for employment, This is shown in the next horizontal bar chart which shows skills by demand level:

Management and Information Technology are the most popular skills followed by Sales and Manufacturing respectively.

Other necessary skills encompass HCPR (Healthcare), BD (Business Development), ENG (Engineering), FIN (Finance), MRKT (Marketing), etc.

**Job Postings by Pay Type:**

Another graph is about the proportion of advertisements for jobs according to the structure of the pay.

It shows that most pay takes the form of yearly salaries, making up 57.18 % of all listings in the graph.

Following are the distributions for hourly pay, 40.86%.

Some pay types like bi-weekly, weekly, and monthly are very low in the listings (0.13% for monthly).

**More Job Types Employed:**

Helping examine what types of work are done in the job adverts will be by use of a bar graph:

There are more than full-time jobs in the market.

Contract and part-timers also exist, but these are overshadowed by full-time obligations.

There are very few posts about temporary internships or voluntary or other types of engagements.

To sum up, this summary of statistics reviews the key features of job listings, particularly salaries for present job availability, required qualifications, salary packages, and kinds of employment (full-time, Projects, Casual, etc.). The check demonstrates that most of the employment opportunities in this context are concentrated on managerial, Information technology, and selling occupations, local, and on an annual basis.