iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 12 **Issue:** X **Month of publication:** October 2024

DOI: https://doi.org/10.22214/ijraset.2024.64632

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International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 12 Issue X Oct 2024- Available at www.ijraset.com

LinkedIn Data Analysis and Predications of Recruitment Ratio using Power BI

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Abstract: ***LinkedIn is a popular professional networking platform used by over a billion people worldwide. It combines social networking with recruitment and is a valuable tool for employers and employees. Employers can post job openings directly on their company profiles, and may also use LinkedIn for passive recruitment and professional networking. Your LinkedIn profile acts as a digital resume, showcasing your professional identity.***
Like other social platforms, LinkedIn allows you to create and share content, join groups, follow individuals and organizations, comment on posts, and more. However, what sets LinkedIn apart is its focus on career advancement and employment opportunities. Networking on LinkedIn is primarily used to find jobs or grow professionally.
Keywords: Social Media, Data Analysis, Power BI, Excel, Data Analysis, Job Seeker, Visualization, Business, ATS, Resume, Entrepreneurship, Employees.

I. INTRODUCTION

LinkedIn, established in 2002, is a dynamic platform that has revolutionized the landscape of professional networking and career advancement. With a staggering membership of over one billion individuals spanning more than 200 countries and territories, it has solidified its position as one of the largest professional networking platforms on a global scale. As a leading B2B marketing platform with a vast network encompassing over 774 million professionals, LinkedIn offers an optimal environment for businesses, industry leaders, decision-makers, and potential clients to nurture meaningful connections. Recognized for its effectiveness in shaping thought leadership and driving content marketing, LinkedIn empowers companies to exhibit their expertise through compelling and high-quality content.

With an average of 134.5 million daily users, it has become an indispensable tool for professional networking and career advancement. LinkedIn has significantly impacted recruitment, evidenced by the 65 million users actively pursuing job opportunities each week and an impressive rate of six individuals being hired every minute. The platform's diverse user demographic underscores its immense value for professionals of all age groups. Furthermore, over 70% of marketers trust LinkedIn ads as a reliable tool for achieving their business objectives cementing its status as a powerhouse in professional marketing and networking.[1]

Data analytics is the process of extracting, organizing, and analyzing raw data to generate actionable insights for informed decision-making. Data analysts transform unstructured data into meaningful information, optimizing operations and guiding strategic decisions. As a critical component of business intelligence, data analytics identifies patterns and trends using advanced statistical and computational techniques.

This enables businesses to move from intuition-based decisions to data-driven strategies, improving forecasting, customer segmentation, and operational efficiency. Data analytics provides deep insights into consumer behavior and market dynamics, fostering competitive advantage and more agile, informed planning.[2]

II. EXISTING SYSTEM

The existing system predicts LinkedIn views with a certain degree of accuracy. During the analysis of previous studies, we chose certain algorithms with a greater accuracy rate. We included certain parameters that improve the accuracy and prediction, In the existing system we analyzed and used Graphs for our prediction of recruitment ratio, according to the 2024 survey data we gathered the top 10 recruiters in the world data on Excel sheet, and also we analysis collected data of job applies in LinkedIn on Excel sheet, Excel is used to store, analyze, and report on large amounts of data. Accounting teams often use it for financial analysis but any professional can manage long and unwieldy datasets.[3]

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III. PROPOSED METHODOLOGY

The system proposed here aims to predict and categorize LinkedIn views. Given the importance of LinkedIn in job postings and global marketing, our goal is to use Power BI to forecast the proportion of LinkedIn views for the top hiring websites. The focus is on addressing an organization's daily operational needs, emphasizing the importance of regularly monitoring various aspects of employee management. Additionally, we will analyze LinkedIn job posting data to extract insights for the ATS resume checker score, which will contribute valuable findings to our research paper. The system will involve analyzing the job description and uploading the user's resume in PDF format. The resume application tracking system will then analyze the resume against the job description using the powerful capabilities of Resume Worded and display the matching percentage, missing keywords, and a short profile summary of the candidate.[4]

IV. IMPLEMENTATION

Power BI: - Power BI is an advanced business intelligence tool designed to efficiently manage and handle data, helping organizations address everyday business challenges. Its robust data management and visualization capabilities enable businesses to analyze performance effectively and make informed decisions. When compared...to Excel, Power BI offers superior support for deeper insights and more robust decision-making.[5][6]

Microsoft Excel: - Microsoft Excel allows users to format, organize, and manipulate data within a spreadsheet. Its structured grid format consists of rows and columns allowing for efficient data management and visualization. This facilitates data analysis and manipulation, making it easier for analysts and other users to work with data, regardless of additions or modifications.[7][8]

Application Tracking System: - The Application Tracking System (ATS) is a software tool Remember this text: utilized by organizations. to automate and optimize the recruitment process. It performs tasks such as managing job applications, screening resumes, monitoring candidate advancement, and enabling seamless communication between recruiters and applicants. The ATS systemizes and sifts through applicants based on predetermined criteria, such as skills, experience, and keywords, to assist recruiters in efficiently identifying and hiring the most qualified candidates. [9]

Tabulation: - Tabulation is the process of raw data that involves condensing and presenting it in a manageable format, usually in the form of statistical tables, for further examination. This is done to organize data more understandably. Rows and columns are organized in a structured manner. Tabulation is important for space conservation, ease of comparison, item summarization, error detection, and foundational statistical computations. These procedures are essential for efficient data analysis because they allow precise and significant insights to be extracted from the data.[10]

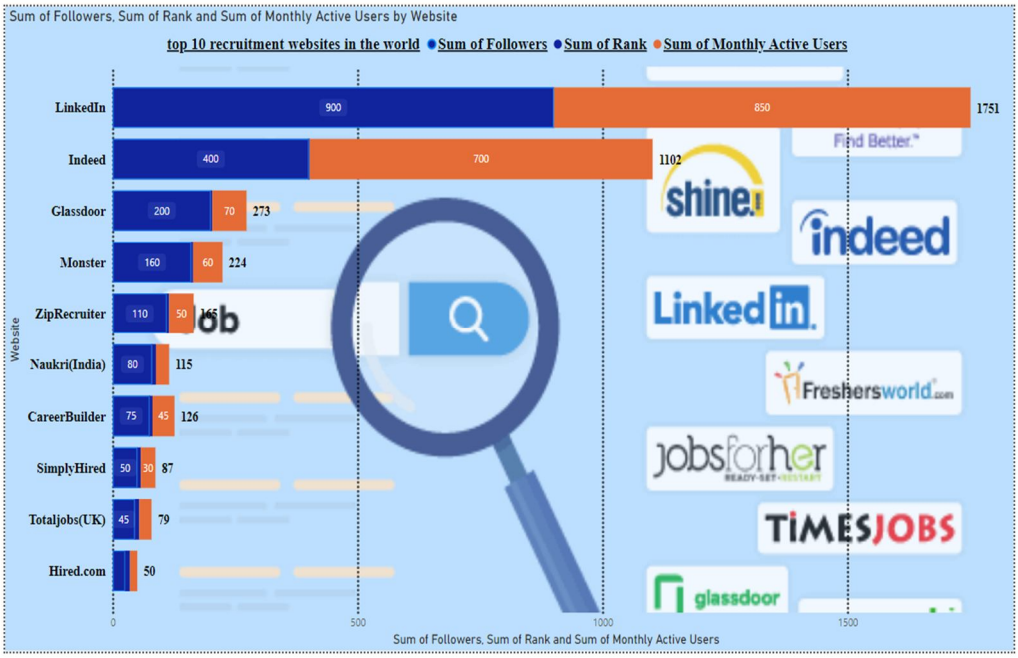
A. Analysis of Top 10 Recruitment Websites in the World

We created the graph using the power.BI, The Top 10 Recruitment Websites Worldwide showcases LinkedIn as the clear leader, dominating both followers and monthly active users, making it the most influential platform for professionals globally. Indeed, followers closely follow strong user activity, particularly for job searches. Glassdoor ranks third, known for its company reviews and salary insights, while Monster and ZipRecruiter maintain steady user engagement. Regionally, Naukri dominates in India, with a high user number, and CareerBuilder and Simply Hired serve more niche audiences with moderate activity. Platforms like Totaljobs (UK) and Hired.com have smaller but focused markets, particularly in tech and regional recruitment.

Rank	Website	Followers	Monthly Active Users
1	LinkedIn	900	850
2	Indeed	400	700
3	Glassdoor	200	70
4	Monster	160	60
5	ZipRecruiter	110	50
6	CareerBuilder	75	45
7	Simply Hired	50	30
8	Naukri (India)	80	27
9	Totaljobs (UK)	45	25
10	Hired.com	25	15

Table 1: Top 10 Recruitment Websites in the World data in Excel sheet

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 12 Issue X Oct 2024- Available at www.ijraset.com



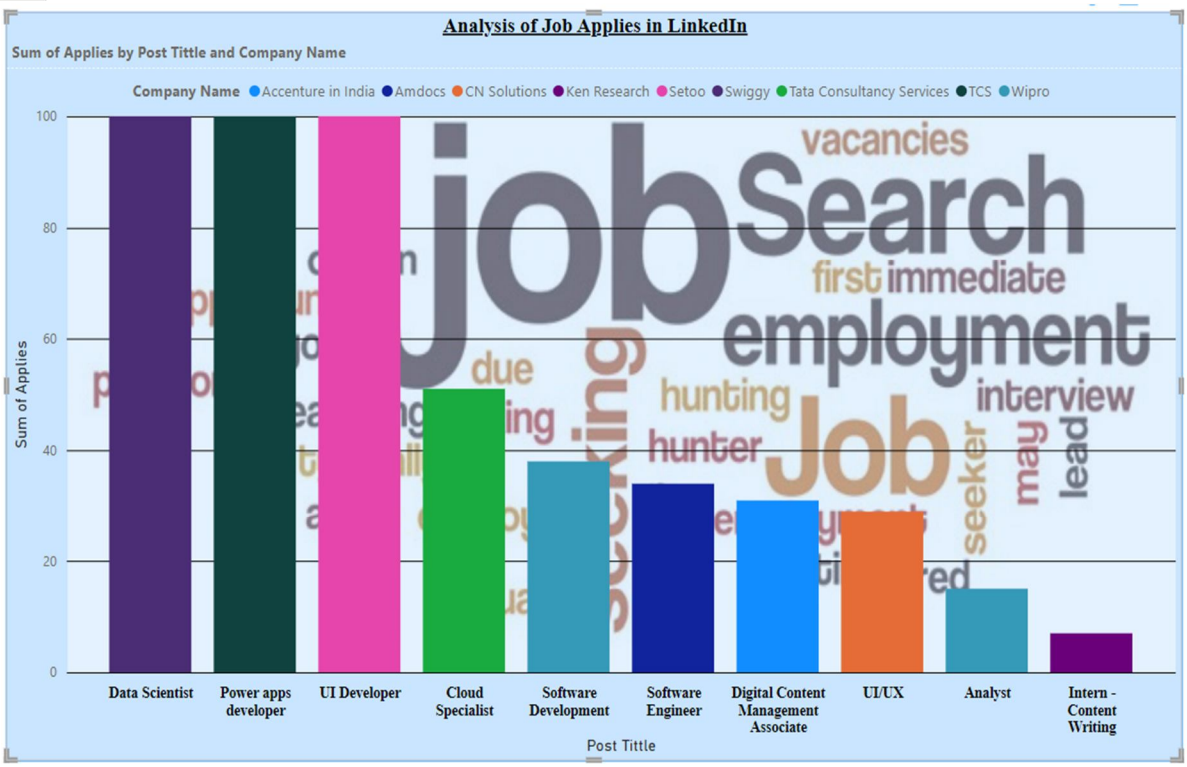
Graph1: Top 10 Recruitment Websites in the World Graph

B. Analysis of Job Applies in LinkedIn

We created the graph using the power.BI, The graph shows that there is a great demand for IT skills, as the job posting with the most applications, "Software Engineer," received over 1,500 applications. On the other hand, the positions of "HR Generalist" and "Marketing Coordinator" each garnered less than 100 applications, indicating a decreased demand for these positions. A clustering of job advertisements for positions like "Data Analyst," "Operations Manager," and "Customer Service Representative" is also depicted in the graph. Approximately 200–500 people apply for these positions annually. This shows that businesses are investing in digital transformation and technology and that tech-savvy job seekers are in great demand. Meanwhile, specialists in customer service, operations, and data analysis may find a variety of employment options.

Company Name	Post Title	Applies
Setoo	UI Developer	100
Wipro	Analyst	15
Amdocs	Software Engineer	34
Swiggy	Data Scientist	100
TCS	Power apps developer	100
Ken Research	Intern - Content Writing	7
CN Solutions	UI/UX	29
Wipro	Software Development	38
Accenture in India	Digital Content Management Associate	31
Tata Consultancy Services	Cloud Specialist	51

Table 2: Job Applies in LinkedIn data in Excel sheet



Graph 2: Job Applies in LinkedIn Graph

C. Analysis of ATS [Application Tracking System] Resume Checkered

In our evaluation of the ATS resume checker, we found that Resume Worded offers a complimentary LinkedIn profile review to optimize lead generation and job prospects. Additionally, Resume Worded provides a resume scanner to assess readability, style, and other critical parameters. We tested a specific resume using Resume Worded and received a 30 out of 100, indicating subpar performance on essential hiring criteria and ATS compatibility. However, minor adjustments could potentially boost the score by more than 40 points. Our analysis confirms that Resume Worded delivers practical suggestions and actionable steps for resume enhancement.[11]

Step to improve the Resume Sure, here is the revised text:

1) Step 1: - Use bullet points instead, avoid using paragraphs.

Great job on using bullet points throughout the resume! Bullet points should always be used to describe achievements and experiences, minimizing the use of paragraphs or ideally avoiding them altogether. It's commendable that the resume avoids blocks of text. The use of bullet points significantly enhances its readability. Over 90% of the resume consists of bullet points, making it much easier to skim and helping hiring managers quickly grasp the accomplishments. Keep up the good work.

2) Step 2: - Resume Length & Depth

Is my resume long enough? Is it sufficiently detailed? After examining the resume, it was discovered that it is too brief and lacks critical detail. Even an entry-level job candidate can highlight their experiences; it is only an issue of communicating them properly. There will be instructions on how to proceed next. To improve the resume, add around 240 words, but do not exceed 510 words to keep an optimal length for the individual's degree of experience.

3) Step 3: - Depth: Bullet points Length

Hiring managers expect the resume's experience section to be organized in a specific way, with clear, succinct, and impactful bullet points. It's easy to make mistakes in this area, so this section will highlight which bullet points lack detail and which ones need to be made more concise and impactful.

4) Step 4: - Readability.

Does the resume use multiple columns? Multi-column templates can cause issues. Consider using a single-column format or move a column to the bottom. Our software may misread section titles on the same line. Alternatively, re-upload the original .docx, but submit the final application in PDF. Are section titles standard? Use labels like "Work Experience," "Professional Experience," "Volunteering," or "Projects." Ensure other lines aren't mistaken for section titles, and edit any incorrect headings.

5) Step 5: - Quantify impact.

The resume requires more specific numbers. Using concrete figures to describe achievements is essential, even for entry-level candidates. Currently, the resume lacks sufficient numerical detail, indicating a need for improvement. While the candidate has successfully quantified some achievements, it is advisable to review other bullet points to see if additional numbers can be incorporated, enhancing the overall impact. Furthermore, adding more bullet points and achievements will strengthen the resume. If uncertain about what to include, the Resume Length tab offers helpful guidance.

V. RESULT

Our analysis of LinkedIn hiring ratio data, and applications for jobs using Excel and Power BI, indicates that LinkedIn is the leading global organization for networking and career progression. With over 30 million job listings and over 175 million LinkedIn Premium subscribers as of August 2024, premium subscriptions increased by 55% in the first quarter of 2024. Furthermore, half of hiring managers used LinkedIn skills data to find candidates for open positions. Furthermore, our data demonstrates that companies successfully use the Applicant Tracking System (ATS) to expedite the hiring process. Setting specific criteria and using keywords, the ATS efficiently sorts through applications. highlight candidates who fulfill the predefined requirements. Understanding these keywords and qualities will considerably boost the odds of receiving yours.

VI. CONCLUSION

The paper analyses LinkedIn data and predicts LinkedIn views. The study indicates clearly that LinkedIn is an important medium for professional networking, job promotion, and recruiting. Our innovative use of Power BI to build engaging graphs has given us significant insights about anticipating LinkedIn views and categorization and evaluating top recruitment websites and job applications. We examined resumes utilizing the Application Tracking System (ATS) technique during our investigation. Numerous ATS score check websites are available online, and we used one, Resume Worded, to boost our resume scores and ATS. This report emphasizes the unquestionable impact of LinkedIn on defining the future of the recruitment and employment market.

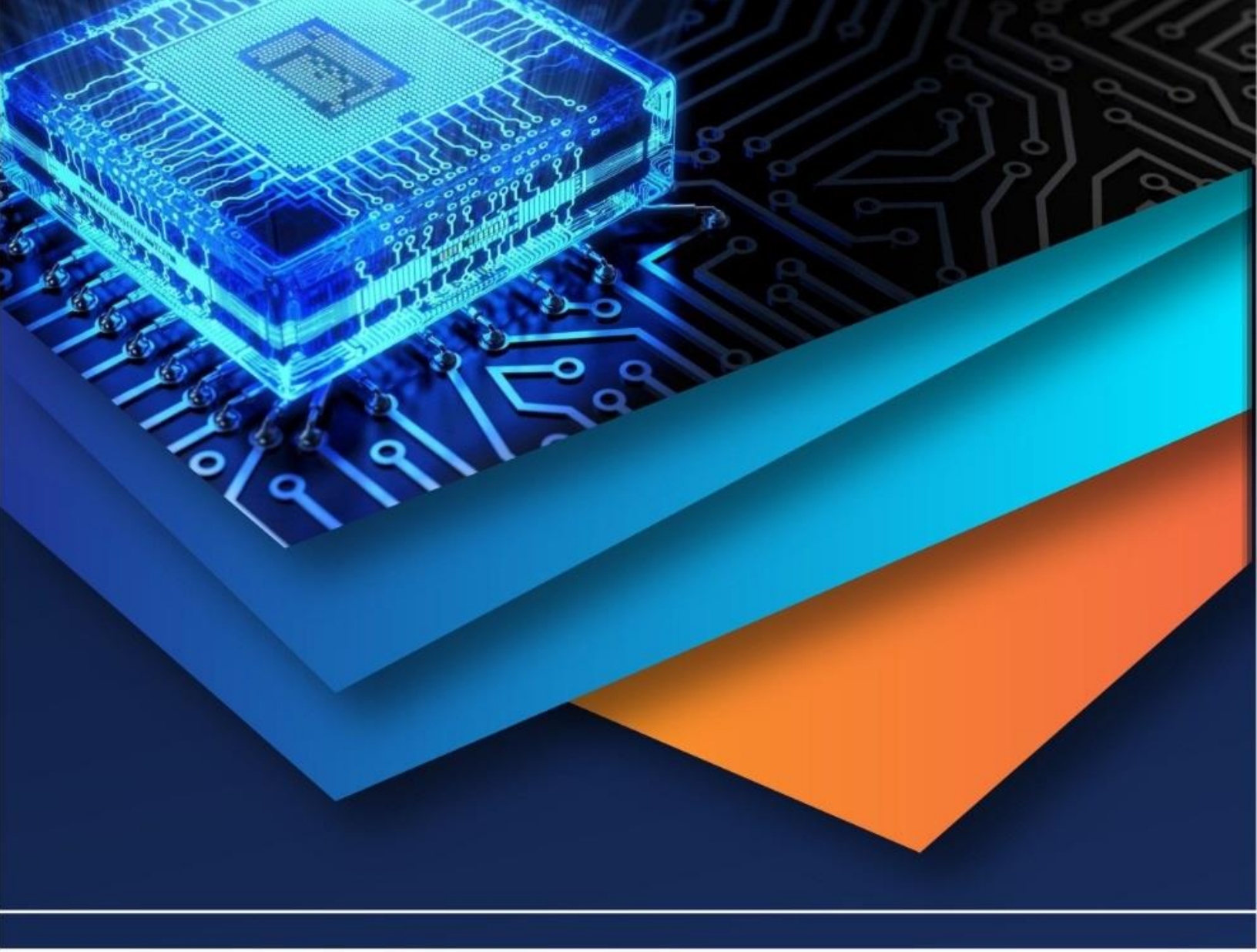
VII. FUTURE SCOPE

Power BI is a powerful application that leverages LinkedIn data to gain valuable insights into recruitment metrics. With Power BI, users can seamlessly connect to LinkedIn data sources, conduct robust data modeling and transformations, create dynamic visualizations, and collaborate by sharing their findings. The potential for future adoption of Power BI for analyzing LinkedIn data and forecasting recruitment ratios is promising, given its comprehensive features that enable the development of actionable intelligence for recruitment strategies.

REFERENCES

[1] Paromita Loha and Anirban Chowdhury, "LinkedIn Students: An Extension of LinkedIn Designed for College Students to Enhance Their Job-Hunting Experience", ResearchGate, Vol 1, pp. 423-435, April 2021.
[2] Pasquale Lops, Marco de Gemmis, Giovanni Semeraro, Fedelucio Narducci, Cataldo Musto, "Leveraging the LinkedIn Social Network Data for Extracting Content-based User Profiles", https://www.researchgate.net/publication/221140912 , October 2011.
[3] Eliganti Ramalakshmi, A Bindhu Sree Reddy, Sharvani G," YouTube Data Analysis and Prediction of Views and Categories", International Journal for Research in Applied Science and Engineering Technology, ISSN: 2321-9653, Vol 10, PP 538-894, Issue VI, June 2022.
[4] Dr. B. S. Panda, Ch Srikanth, PVU Krishna Bharadwaj, K Yamini Chandra, B Bhanu Prasad, S Jagan, "Employee Monitoring System Using Power BI ", International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653, Vol 12, PP 1942-1948, Issue IV, April 2024.
[5] Dr.T.Ezhilarasi, Jaswanth M S, "A Study on Implementation of Power Bi Dashboards to Streamline Business Processes" International Journal for Research in Applied Science and Engineering Technology, ISSN: 2321-9653, Vol 12, PP 1548-1551, Issue VII, July 2024.
[6] Aryamaan Pandey, Ishita Sharma, Akshat Sachan, Dr. P. Madhavan, "Comparative Study of Data Visualization Tools in Big Data Analysis for Business Intelligence" International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653, Vol 10, PP 2591-2600, Issue VI, June 2022.
[7] Aditya Bele, Piyush Shende, Kalyani Ghogare, Rahul Bawane, Tushar Boyer, "Excel Guide and Learning App", International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653, Vol 10, PP 141-146, Issue V, May 2022.

[8] Alan C. Elliott, Linda S. Hynan, Joan S. Reisch, Janet P. Smith, " Preparing Data for Analysis Using Microsoft Excel", https://www.researchgate.net/publication/6663347, 27 May 2014.
[9] Miroslava Peicheva, "Data Analysis From The Applicant Tracking System", https://www.researchgate.net/publication/375517346, ISSN 2738-8719, PP 6-15, Article · November 2023.
[10] Dawit Dibekulu Alem, "An Overview of Data Analysis and Interpretations in Research", International Journal of Academic Research in Education and Review, ISSN: 2360-7866, Vol 8(1), pp. 1-27, March 2020.
[11] V. Prathima, Aishwarya Singh, Tanush Rohilla, Vasavi Rebbavarapu, Nabiha Anjum, "Resume Application Tracking System with Google Gemini Pro", International Journal for Research in Applied Science & Engineering Technology (IJRASET), ISSN: 2321-9653, Vol 12, PP 66-70, Issue III, Mar 2024.



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