

UNIVERSITI SAINS MALAYSIA

Under the Supervision of Dr. Muhammad Shabir

Course Title: ABW506D Data Storytelling and Visualization

Group Member Name	Matric Number
Abdelrahman Mahmoud Lotfy	P-EM0184/23
Alaa Abdelkarim Ahmed Mohamed Hassen Seif	P-EM0199/23
Mohamed Ashraf Hussein Sayed	P-EM0203/23
Mohamed Mahmoud Lotfy	P-EM0185/23
Nahla Ahmed Ibrahim	P-EM0211/23
Sherouk Ahmed Mohamed Abdelrahman Shehata	P-EM0191/23



Report on

WUZZUF.com

Egypt's No. 1 Online Recruitment Job Site

Wuzzuf

Developed by BasharSoft in 2012

The online recruitment platform that

- Helps employers hire the right talent
- Connects professionals with the right career opportunities
- Provides dedicated full lifecycle recruitment support.

BasharSoft is a Tech company built with the mission of building efficient employment marketplaces and employment ecosystems.

Wuzzuf has the largest database of job seekers & employers in Egypt all in a full-fledged employment marketplace.

Therefore it excels in matchmaking and creating transparency for job seekers and recruiters.

Wuzzuf's Target is white-collar and highly educated professionals

Wuzzuf has a range of Sub-categories

WUZZUF Coaches

WUZZUF Internships

WUZZUF Startups

Methodology

The data gathered from and provided by Wuzzuf contains 4 sheets

- Applications

Applications show which Job Seeker (JS ID) applied to which job (Job ID) using a unique Application (Application ID). Additionally, it shows when was the job applied to.

- Job Seekers

Job Seekers focuses on JS ID and provides information on the JS such as Age, gender, location, and even work experience.

- Jobs Posted

Data in jobs posted is related to each job and shows categories such as the required gender (If mentioned) for the job, career level, education level, job field, and job title

- Profile Views

It combines information on the views and view iD provided by each Job Seeker, and the application ID (if the Job seeker applied), which leads to the conclusion that lack of application ID means the view of the post did not result in an application.

So whether the goal is to find a job or an employee, Wuzzuf is the perfect destination.

**The Problem Wuzzuf or BasharSoft is facing is rooted
in the large quantity of data dealt with on a daily
basis.**

**To succeed in its mission to build a more cohesive
employment ecosystem Wuzzuf is required to
continuously outperform competing organizations
such as LinkedIn, Indeed, and Glassdoors.**

**In order to give solid recommendations to encourage
Wuzzuf on its mission, answers are required to some
research questions.**

By looking at data gathered during the years 2020 to 2022, we aim to answer 7 research questions. Involving the job Seekers, job types, applications and geographic locations. In this regard we give recommendations and forecast the demand for required experience years over the 12 months of 2023.



QUESTION 1:

In regard to Experience Years required, on Average, which fields require most and least experience?

To start off with the Maximum Experience Years required by the job field, the fields requiring the most Experience are related to:

- C-level Executive Jobs, and Jobs in Strategy and Consulting
- Engineering (Architecture, Mechanical and Energy)
- Operations Management, Manufacturing and Production
- Hospitality, Hotels, and Food.
- Legal

A specific job field related to other niche jobs is called Other and further examination of this field will provide opportunities for the company to better serve this under-defined market segment.

Based on the following graph the Executive level jobs require the most experience on average meaning that high levels of experience are what is most frequently required when applying for that position.

Average of Maximum Experience years Required for Each Job Field



Question 1 continued



As for Minimum Experience Years Required by specific Job Fields, we notice that the least required Job Field is Customer Service. With remaining fields requiring minimal Experience include:

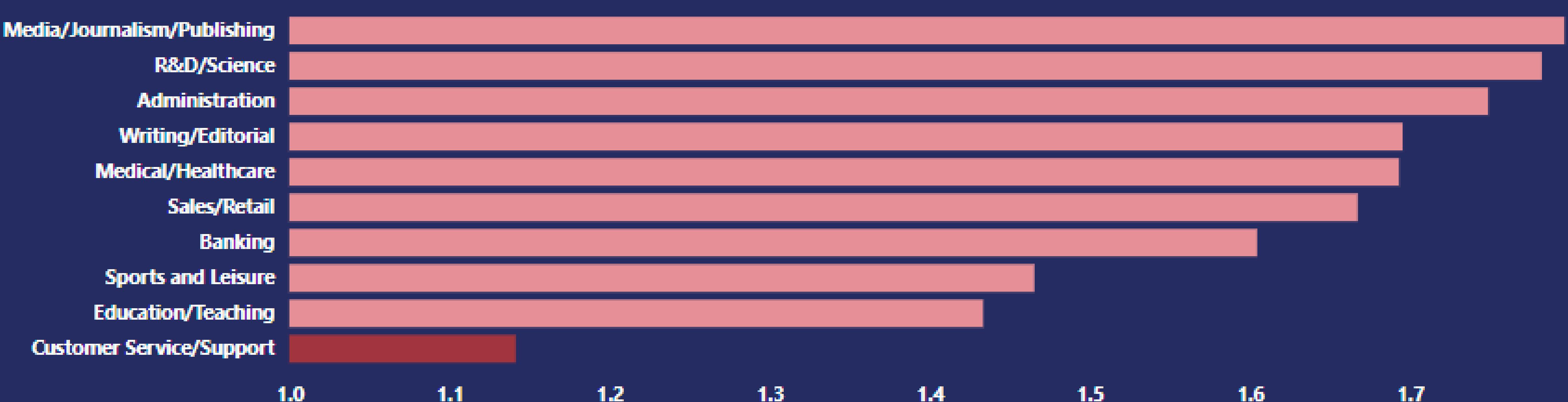
- Education and Teaching
- Sports and Leisure
- Sales and Retail
- Writing and Editorial
- Administrative jobs
- Media, Journalism, and Publishing

Banking, Medical, and Healthcare are also included perhaps because they are general categories of specific titles in the respective fields.

A key insight to be deduced is that most experience-demanding jobs require analytical skills and high levels of technical knowledge and perhaps even specialty knowledge.

While the least experience-related jobs require soft and interpersonal skills, of course, a certain level of knowledge is required but mostly it's a different perspective on demanded skills.

Average Minimum Experience years Required for Each Job Field



Additional information regarding question 1:

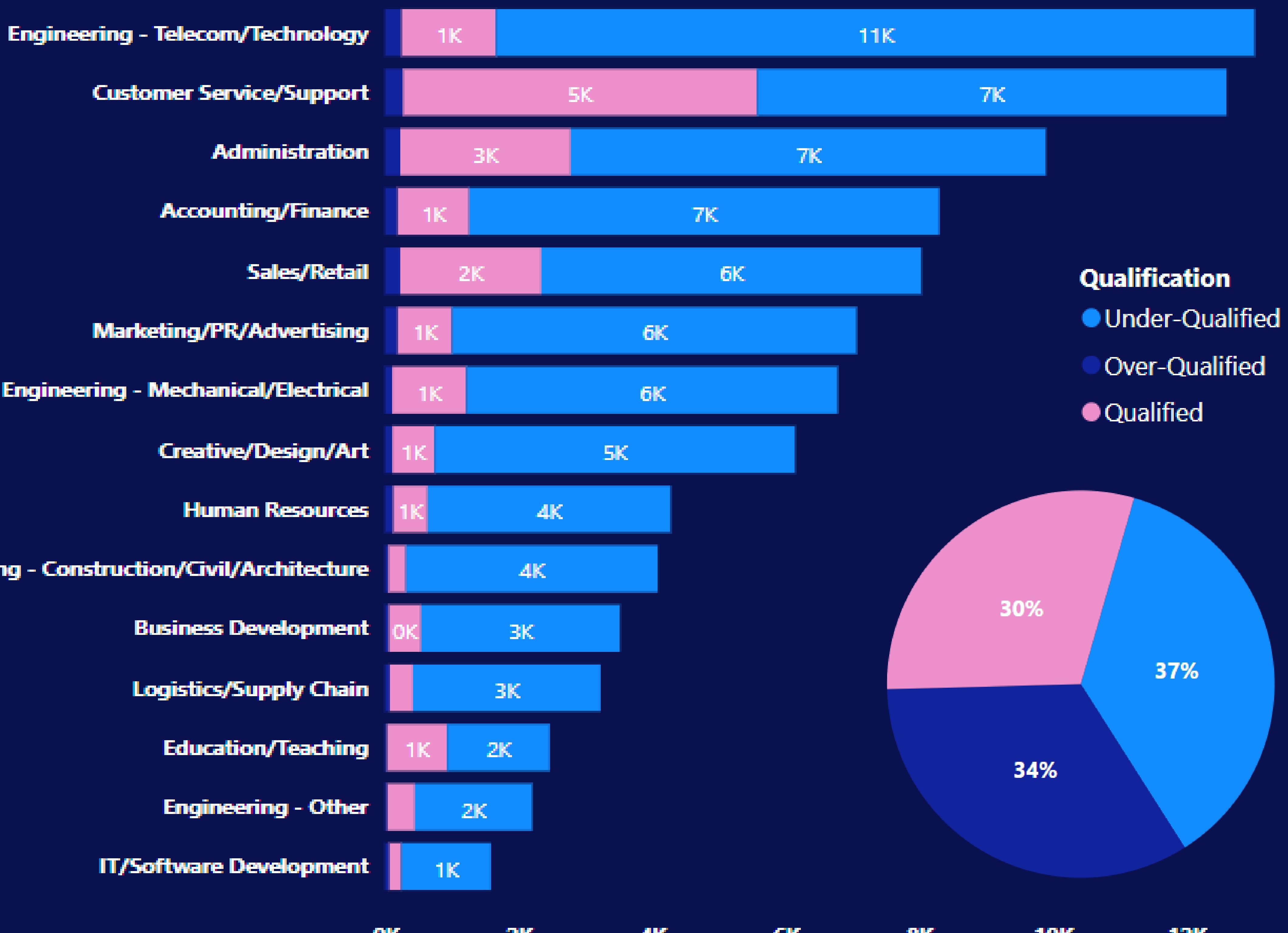
The level of Qualified, under-qualified, or over-qualified job seekers applying to specific Job Fields.

To further understand the market in which Wuzzuf operates we analyze what type of people apply to Jobs based on their level of qualification.

By looking at the Minimum and Maximum required experience and the Job Seeker's personal on-the-job experience. If the Job seeker's experience is between the Minimum required and maximum required experience, then that individual that applied to the job is considered a qualified individual. However as some people tend to apply to jobs they're overqualified for and jobs they are underqualified to work in, resulting in a gap between market demands and the actual job seekers available.

Count of Job ID by Main Job Field and Qualification

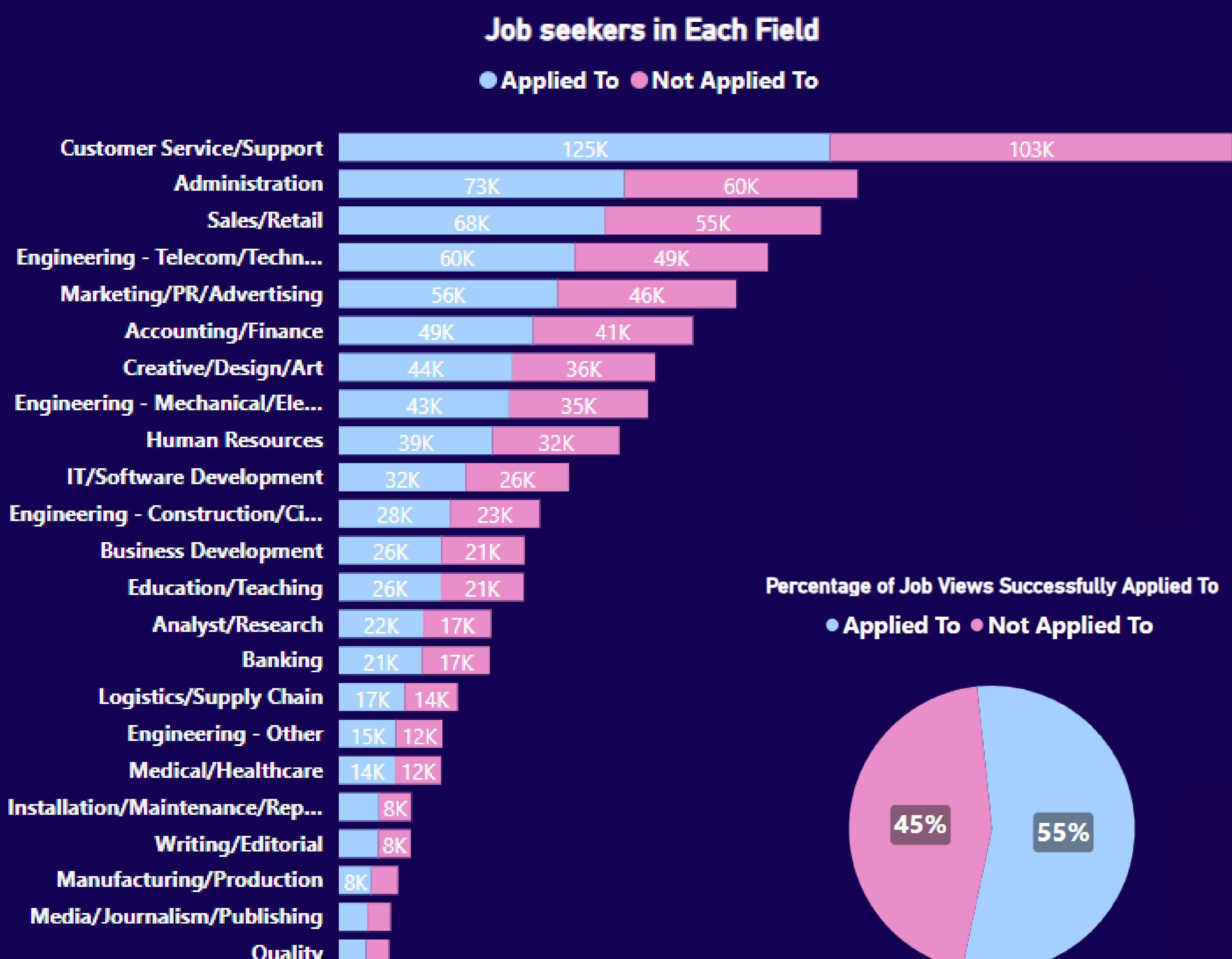
● Over-Qualified ● Qualified ● Under-Qualified



QUESTION 2: How many job seekers have interacted with the job posts offered on Wuzzuf, and which job categories have received the highest number of applications?



Wuzzuf is currently facing an issue regarding the suitability of job offers for job seekers. Approximately 45% of job seekers report that they are presented with job opportunities that do not match their Qualifications.

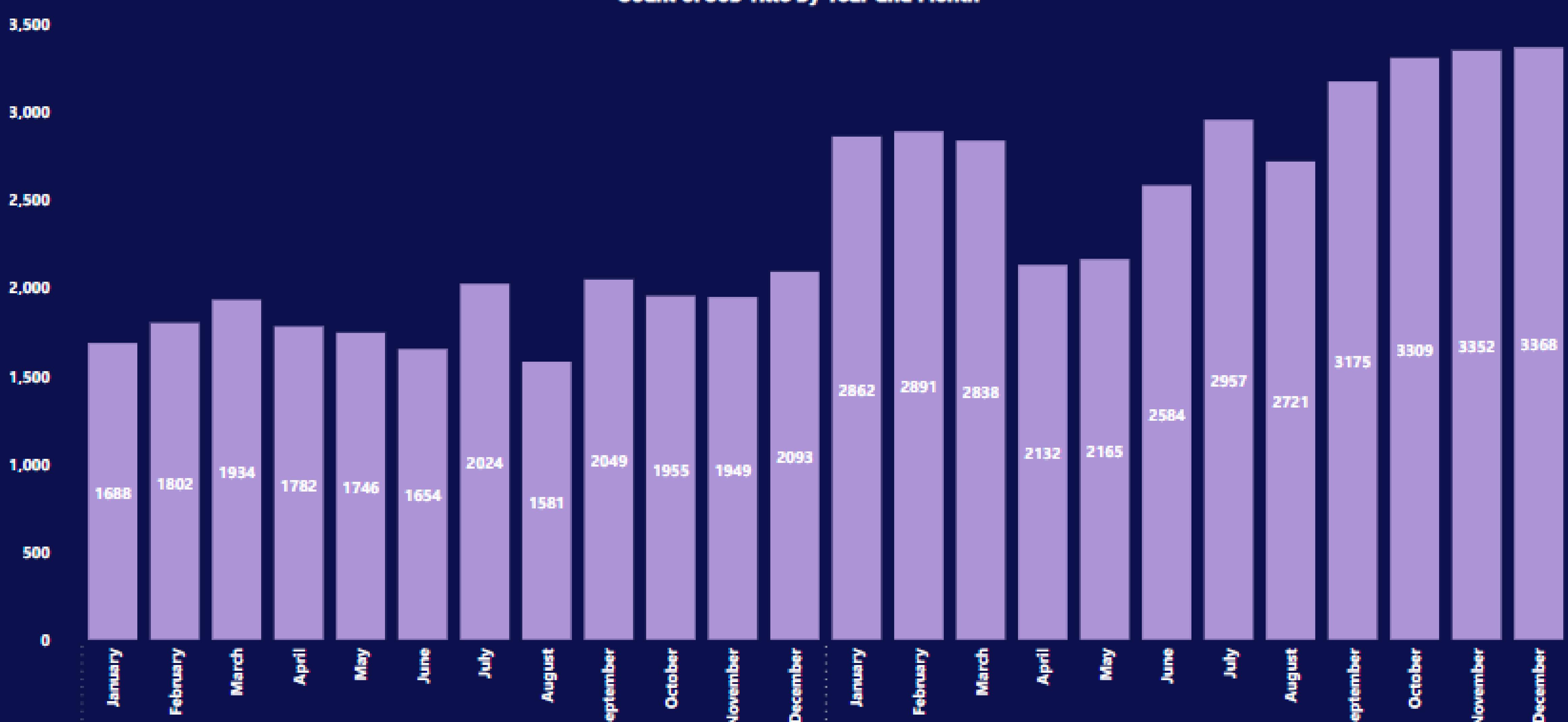


QUESTION 2 continued : Job Offerings on Wuzzuf from 2021 to 2022

There has been a significant surge in job opportunities posted on Wuzzuf from 2021 to 2022 with notable increases observed during the first and last quarters of the year, The percentage of increase between the years stands at an impressive 111%. This signifies a significant annual growth in job postings on the Wuzzuf, expanding individual job opportunities.

the reason for Seasonal Hiring Patterns Certain industries or sectors may follow seasonal hiring patterns during specific periods of the year. This increased demand may result in more job offerings in the first and last quarters, such as October, November, and December.

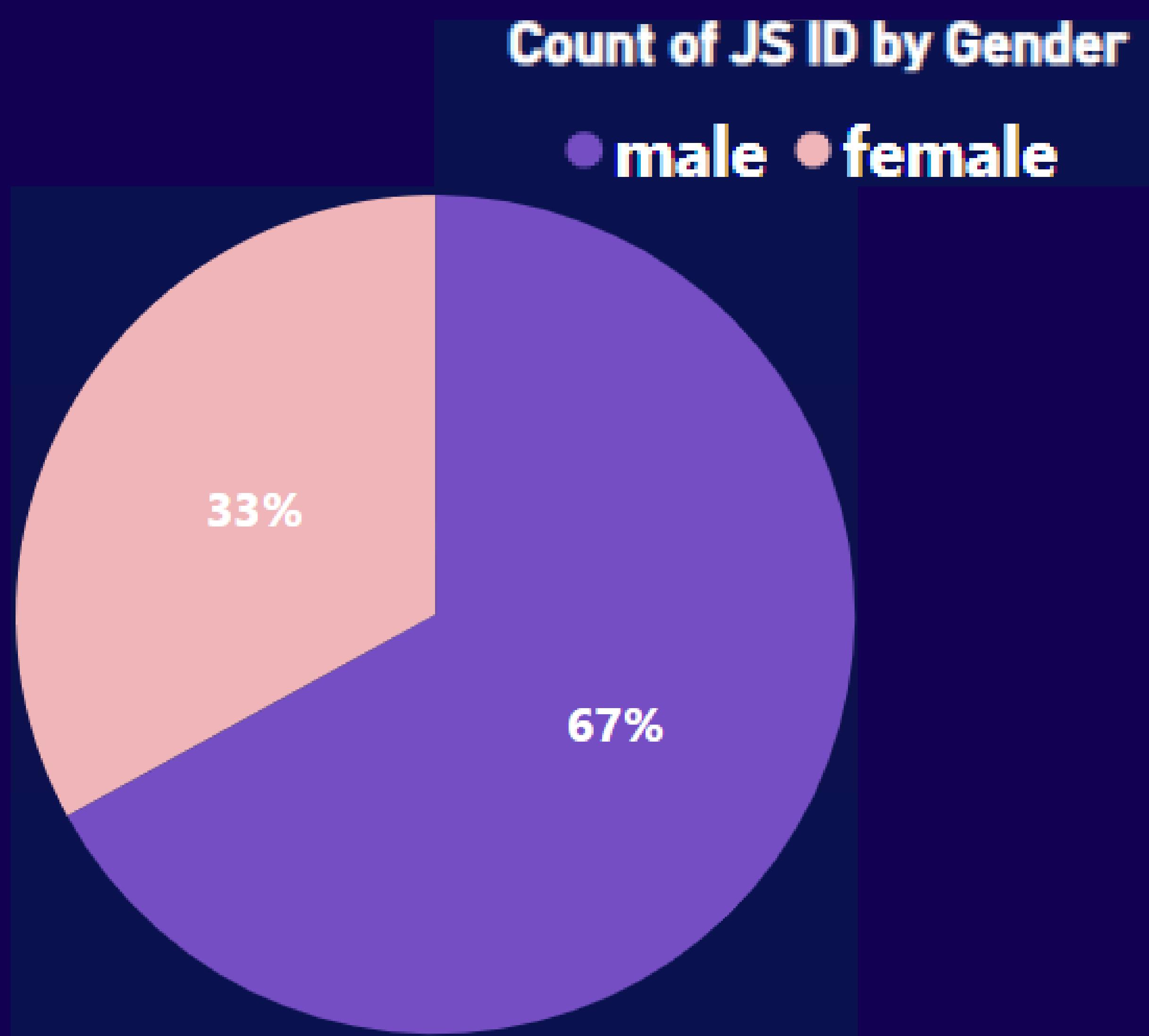
Count of Job Title by Year and Month



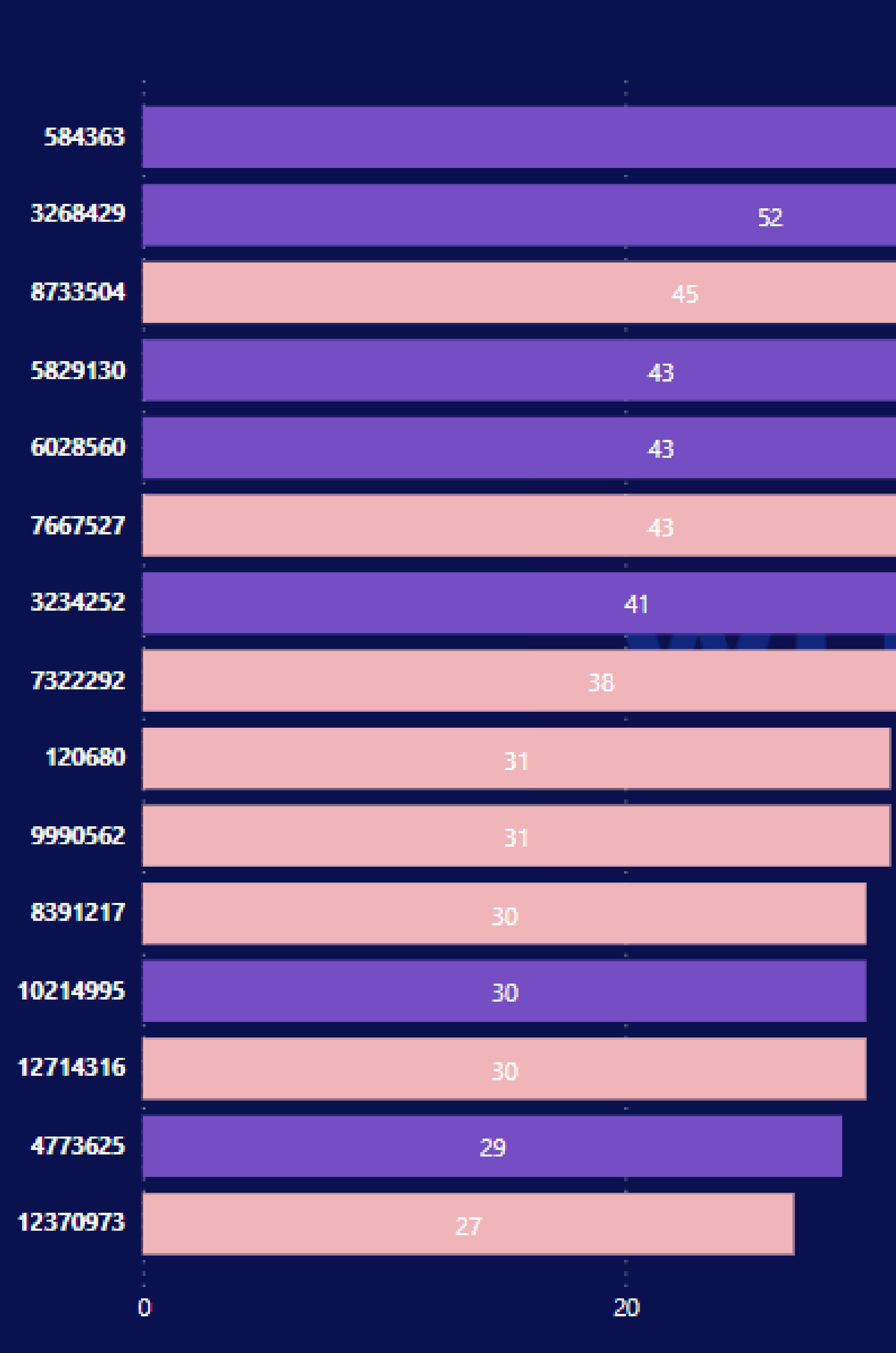
Question 3

How Many Times Specific Job Seekers Applied for Jobs?

From Visualization, We Find that the Majority of Job Seekers are Males



Job Seeker ID and the count of applications

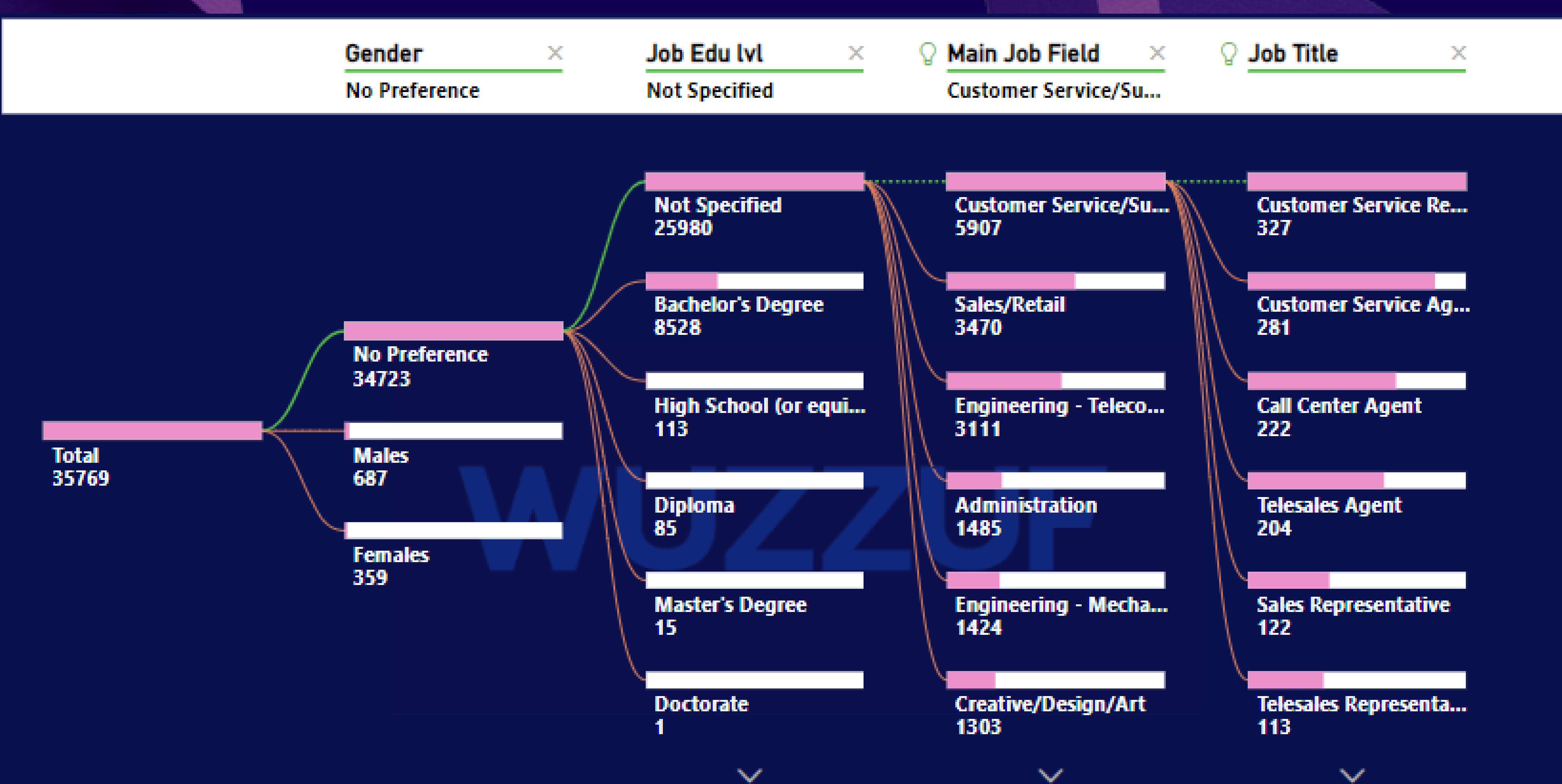


Since Many Job Seekers applied Many Times for Different Jobs This means they are not suitable or qualified enough for the jobs they apply to

Question 4:

Based on gender, what is the main job field and qualifications for job seekers?

From visualization, many job seekers refused to specify their gender and most of them did not specify their education level. We predict that they are still students based on the previous question and many jobs they applied for did not require experience or they can work on it while studying.

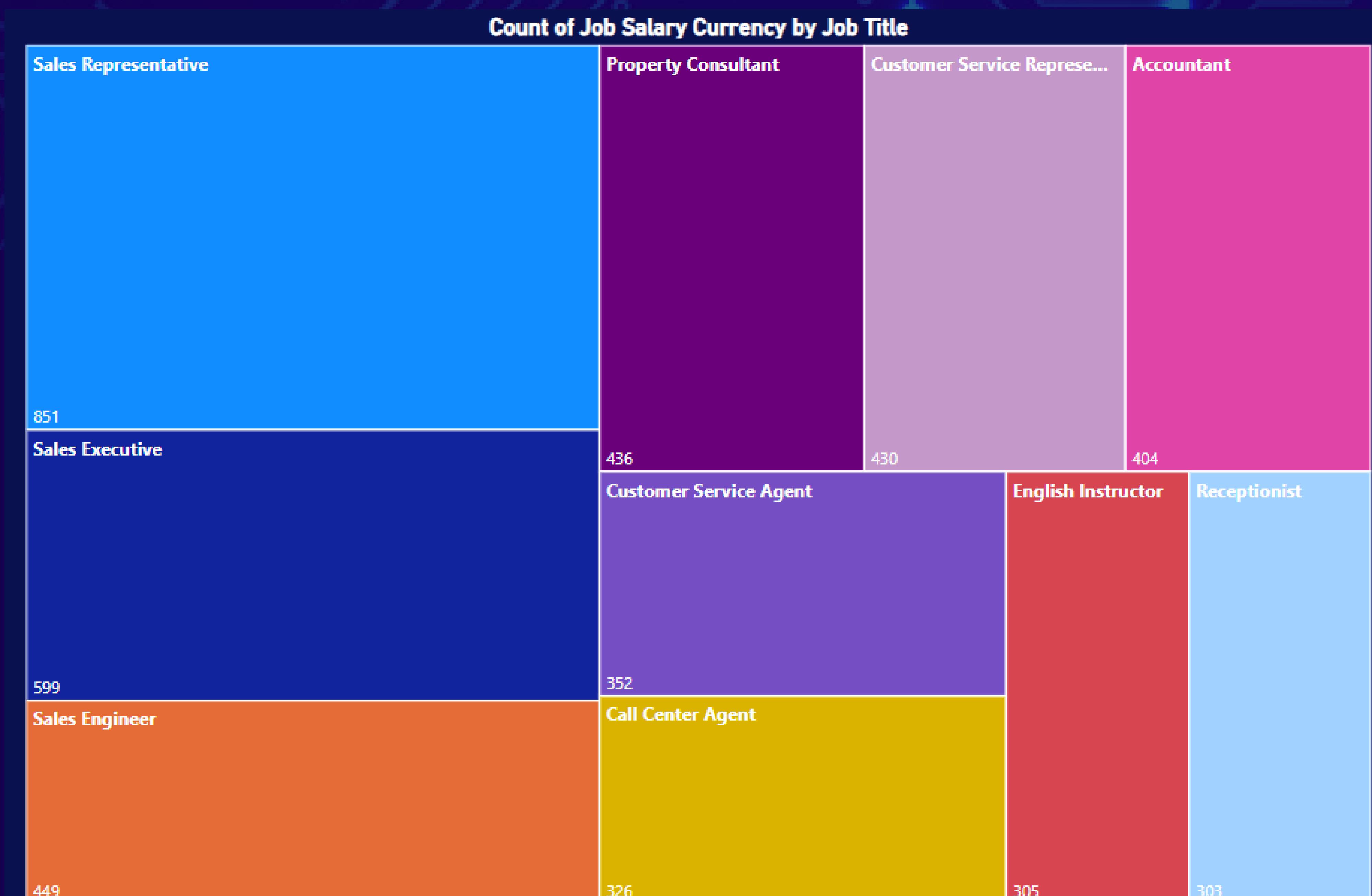


Question 5:

What are the job titles in Egypt getting paid in some of the world's top currencies?

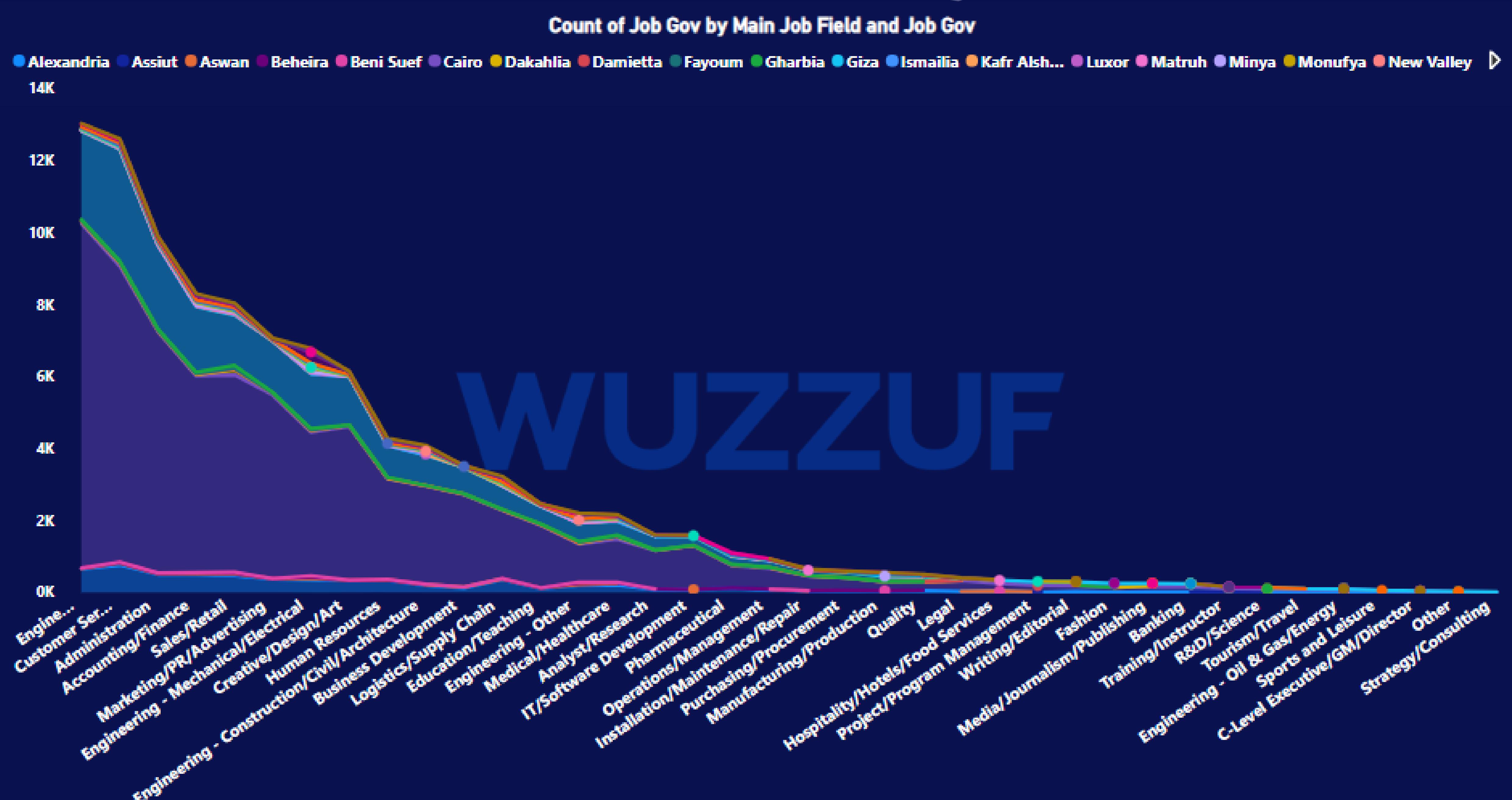
Insight

This visual helped us to know the important jobs related to technology like Full stack developer, Python developer, Mobile app developer, software engineer and others in Egypt that getting paid in the world's top foreign currencies like British Pound, Euro, United States Dollar, and Canadian Dollar.



Question

Is there a relationship
between the job fields
& jobs in governorates?



The Job Field Based on Egypt's Governorates

Insights

From visualizations, we see that job fields are centered around main governorates like Cairo and Alexandria but the most of job fields are centered around Cairo and there are job fields that exist in all governorates like Sales\ Retail and Customer Service\ Support Because they do not need to high requirements and other job fields like Strategy\ Consulting are exist only on main governorates Because these job fields need high requirements. Because all experiences are in the main governorates. Finally, we can say that there is a positive relationship between the job fields and jobs in governorates.



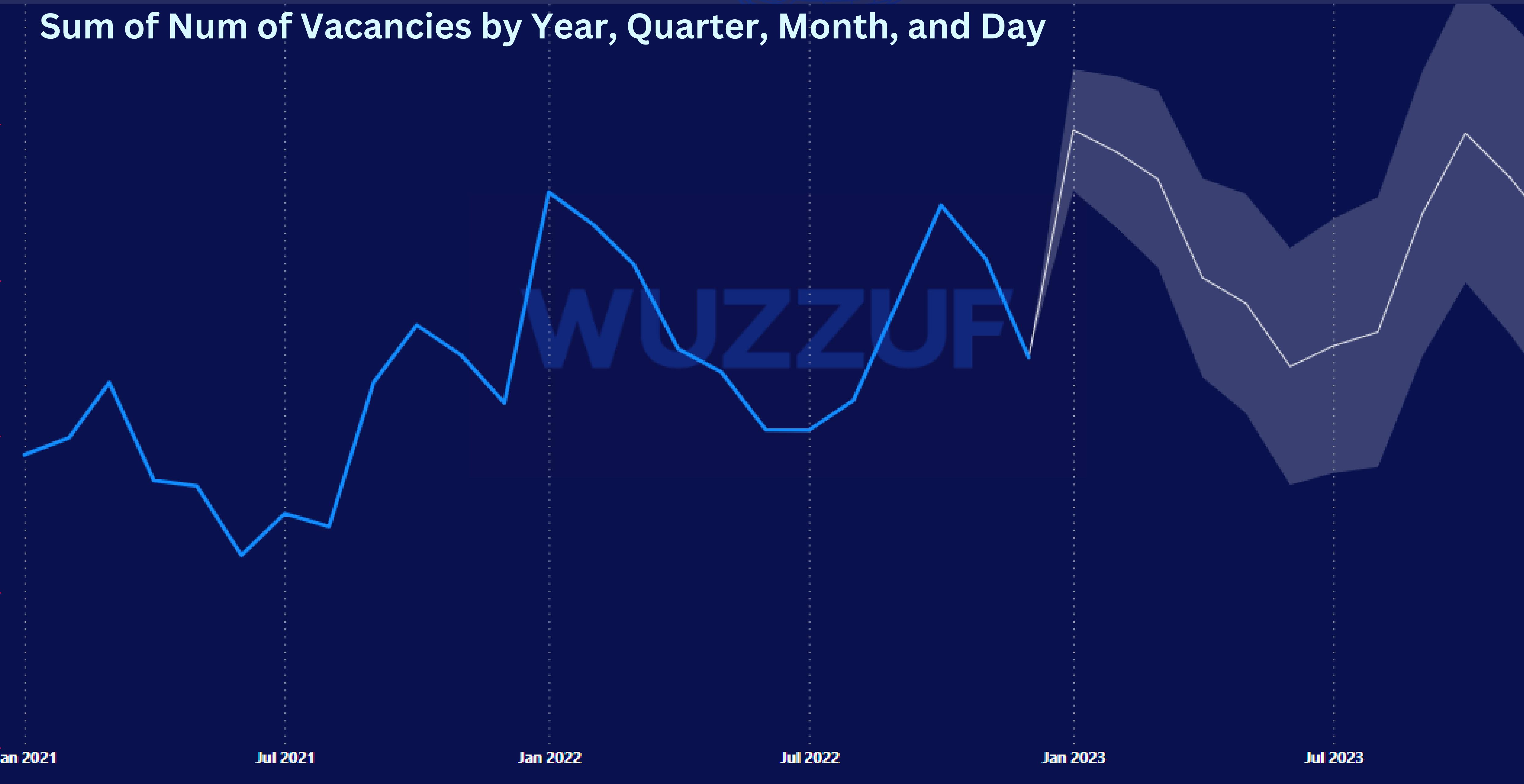
Question 7

What Will Happen in Egypt's Number of Vacancies job in the Future?



Based on this visualization, the number of vacancies will increase, especially in the first quarter of 2023, in fields like business development, engineering-telecom and creative/Design. Job seekers are required to update their skillset and mindset and prepare for a technological, business-oriented future.

Sum of Num of Vacancies by Year, Quarter, Month, and Day



Recommendations Based On Answers from Question 1 & 2

To attract that segment of the market that looks for highly educated, analytical, and talented individuals and get them to apply for the jobs being posted. Wuzzuf can start using AI to build better job posts that include all the pieces of information specified by field and looked for by Job Seekers.

By marketing the right jobs the right way Wuzzuf increases the opportunity of reaching the right audience for the job and providing employers with employee relationships that last long-term.

Therefore, we can recommend that Wuzzuf uses further analytics to look into the reason behind this gap, and perhaps take advantage of it. By helping the under-qualified with direct access to the qualifications required by the market and by providing the over-qualified the right type of opportunities.

It is recommended that job seekers place their emphasis on looking for job vacancies or job opportunities during the first and second quarters of the year, especially in October, November, and December.

it is highly recommended that Wuzzuf developers enhance their system's accuracy in matching jobs. ensure a higher level of relevance between job requirements and job seekers' qualifications. It is also advised for job seekers to regularly update and verify their information to maximize the opportunity to finding their desired job

From Insights of Questions 3 and 4

Because job seekers mostly are from the Gen Z generation.

Which means they were born between 1995 to 2012.

We Recommend

That WUZZUF focuses on posting jobs that require low experience years to be more suitable for them because of being students, fresh graduates, or having few years of experience.



QUESTION 5 RECOMMENDATION

OFFERING COURSES AND
INTERNSHIPS FOR YOUNG IN THESE
FIELDS TO IMPROVE THEIR
TECHNICAL SKILLS AND THEN
BOOSTING THE EGYPTIAN
ECONOMY

Recommendations Based On Insights From Question 6

we should advise companies and other sectors that they should look to other governorates because not all experiences are on main governorates only. Because the other governorates now develop educational and technical skills for their job seekers based on Egypt's vision of 2030. I recommend that Wuzzuf can organize job fairs in these governorates to show the experiences of job seekers in these governorates.

RECOMMENDATION BASED ON INSIGHT FROM QUESTION 7

We encourage WUZZUF to recognize important skills to undergraduates through the courses they create such as **DIGITAL SKILLS**: Data analysis, programming, and digital literacy are three examples of the kind of digital talents that will likely be in high demand as technology continues to grow and affect many different sectors. This includes knowledge of artificial intelligence and business development

