2024 Lebanese Tech Scene Report

Supportful

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ABOUT SUPPORTFUL

Supportful empowers companies to scale their tech teams by providing top software engineers from Lebanon, all working remotely. With a deep understanding of frontend, backend, mobile, QA, data and DevOps needs across various industries, we ensure our clients receive top talent tailored to their specific requirements.

As a mission-driven company, Supportful is committed to reducing Lebanon's brain drain by retaining young talent within the country. Our goal is to have young software engineers work from their hometowns and contribute to the local economy's growth. Join us in creating a future where Lebanese talent excels globally while making a positive impact on their local communities.

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INTRODUCTION

This report outlines the results of a developer survey conducted in Lebanon in July 2024. The survey aimed to provide insights into various aspects of the tech industry, covering demographics, technology adoption, work arrangements, job satisfaction, and retention factors.

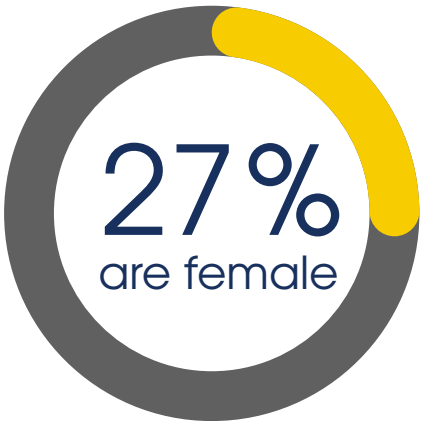
The gathered data offers valuable information for stakeholders interested in supporting and understanding Lebanon's tech ecosystem. Although this is not scientific research, we believe it is the first serious attempt at understanding the tech talent scene in the country.

Here are some of the questions we aimed to address through this survey:

- How are software engineers in Lebanon distributed among gender and age groups?
- Which tech stack is most commonly used in Lebanon?
- How strong is the return-to-offiice mandate in Lebanon?
- What influences software engineers to either leave or remain in a company?
- What is the level of AI adoption among Lebanese software engineers?
- How satisfied are software engineers with their life-work balance?
- Do any of the above discoveries vary based on age or gender?

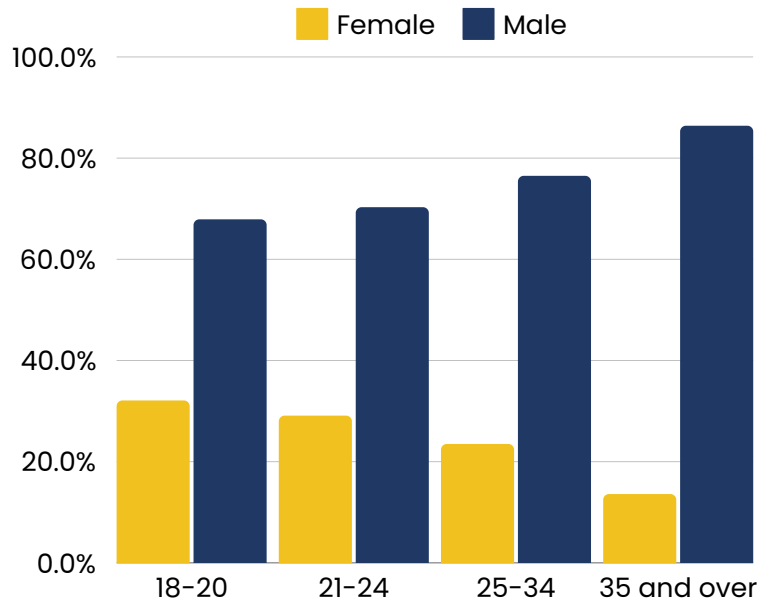
WOMEN IN TECH

Women make up approximately 27% of the survey respondents. If this figure holds as the female percentage of Lebanon's software engineering workforce, it would be significant compared to the global average of 16% found in a **previous LinkedIn study**, and the US average of 22% per **a study by Zippia.**



The data show a decrease in the percentage of women in software engineering as age increases, dropping from 32% in the 18-20 age group to 14% in the 35+ age group. This decline indicates that women seem to distance themselves from coding as they advance in their career.

Gender Representation Across Age Groups



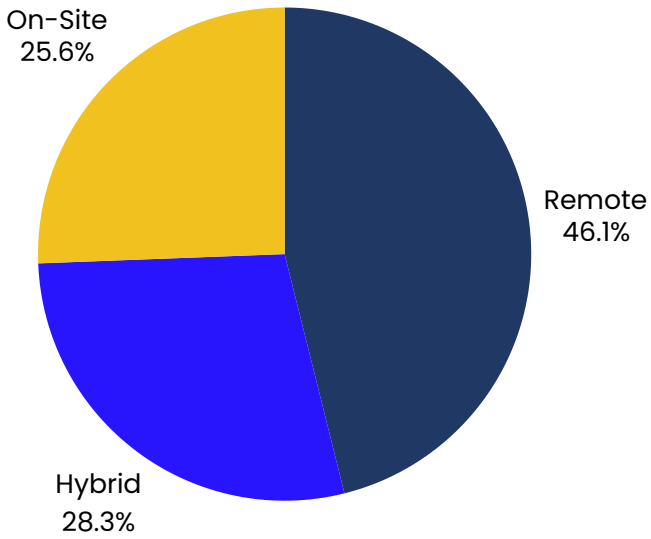
REMOTE WORK IS STILL KING

46.1% of Lebanese software engineers work remotely, 28.3% work in a hybrid arrangement, and 25.6% go to the offiice every day. This is an impressive figure for two main reasons:

1. Despite return-to-offiice mandates across the world, almost half of software engineers surveyed are still working remotely.

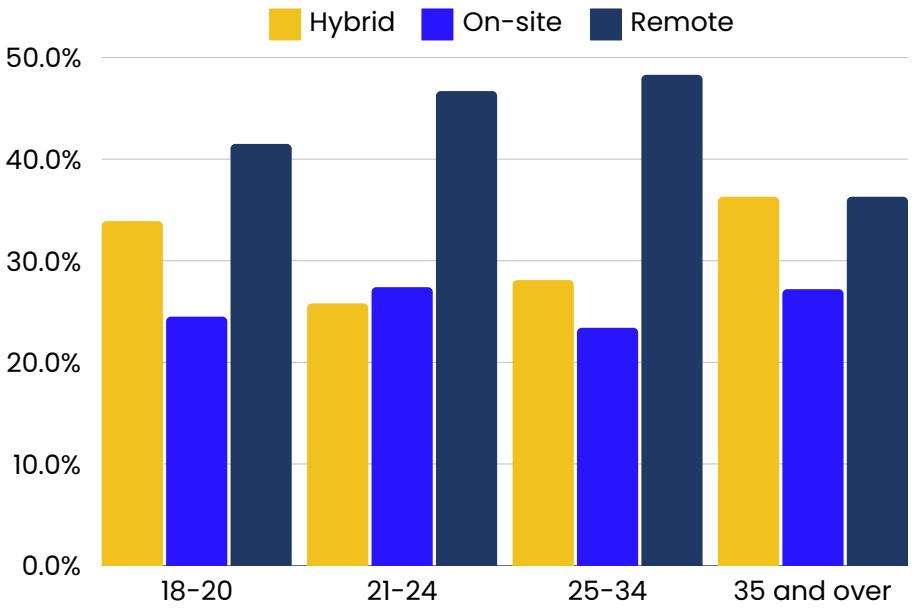
2. The weakness of public infrastructure in Lebanon did not prevent the vast majority of respondents to work from outside the offiice, which means that more opportunities are available to software engineers independently of their location.

Work Arrangement in Lebanon



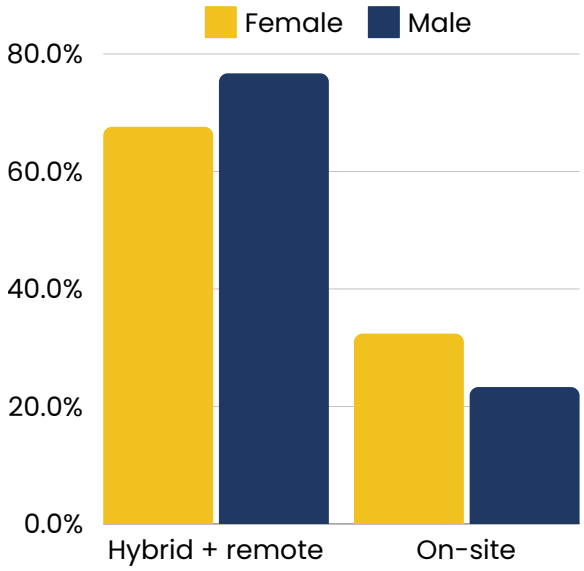
Software engineers aged 35+ seem to be the least working remotely, with only 36.4% of them working fully remotely. The 25-34 age group is the most remote-friendly, having the highest percentage of fully remote engineers (48.3%) and the lowest percentage of on-site engineers (23.5%).

Work Arrangement Across Age



Our survey indicates that there is a gender disparity in flexible work arrangements: 67.6% of females work remotely or in a hybrid setting, whereas 32.4% work on-site. In comparison, 76.7% of males work remotely or in a hybrid setting and only 23.3% work on-site. This discrepancy suggests that female engineers might be working in more traditional companies that are focused on offiice presence, but this remains a hypothesis outside of the survey's scope.

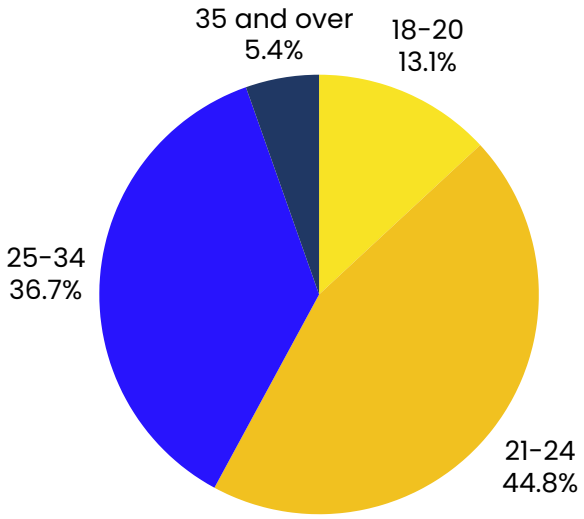
Work Arrangement Across Genders



A PREDOMINANTLY YOUNG WORKFORCE

In Lebanon, 44.8% of software engineers fall within the 21-24 age group, indicating a predominantly young workforce. Globally, data from the 2023 Stack Overflow Developer Survey reveal that around 36% of developers worldwide are aged 20-29, reflecting a comparable yet slightly older trend. When combined with the 36.7% who belong to the 25-34 age group, the segment aged between 21 and 34 years account for almost 82% of the software engineering workforce.

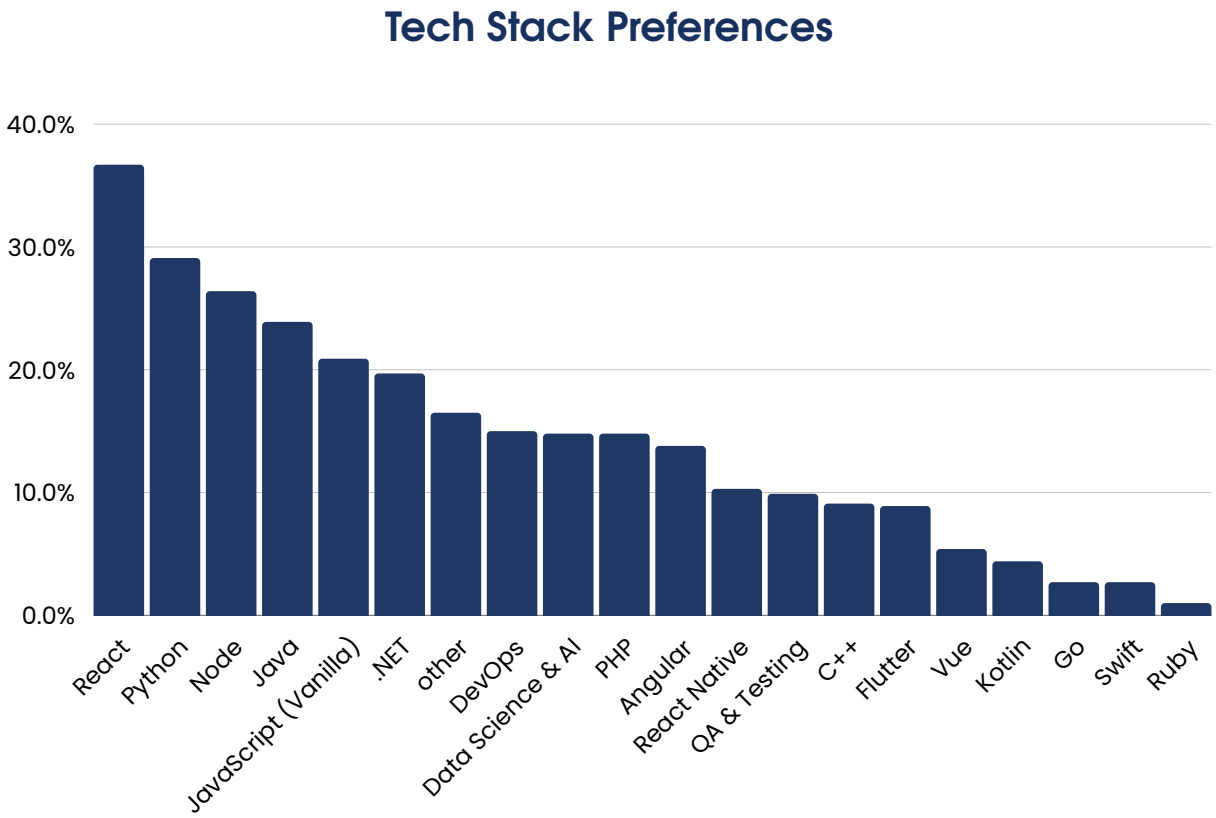
Age Distribution of Developers



THE RISE OF REACT

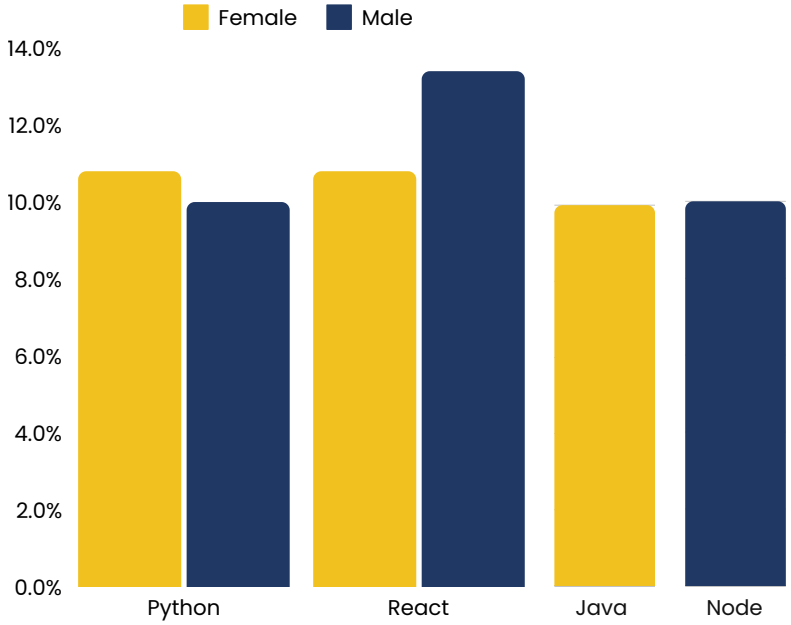
React stands out as the most used technology framework among software engineers in Lebanon with 36.7% of respondents stating they currently use it. Python is in the second position with 29.1% of respondents currently using it followed by Node (26.4 percent) and Java (23.9%). This ranking is in line with the findings from GitHub's 2023 Octoverse report which placed JavaScript, TypeScript, Python, Java, and .NET in the top 5 positions.

It is interesting to note that DevOps and Data Science & AI are on a par with PHP, one of the languages that ranked in the top 5 for years. On the mobile front, cross-platform frameworks such as React Native and Flutter have become much more used than native mobile languages (Kotlin and Swift).



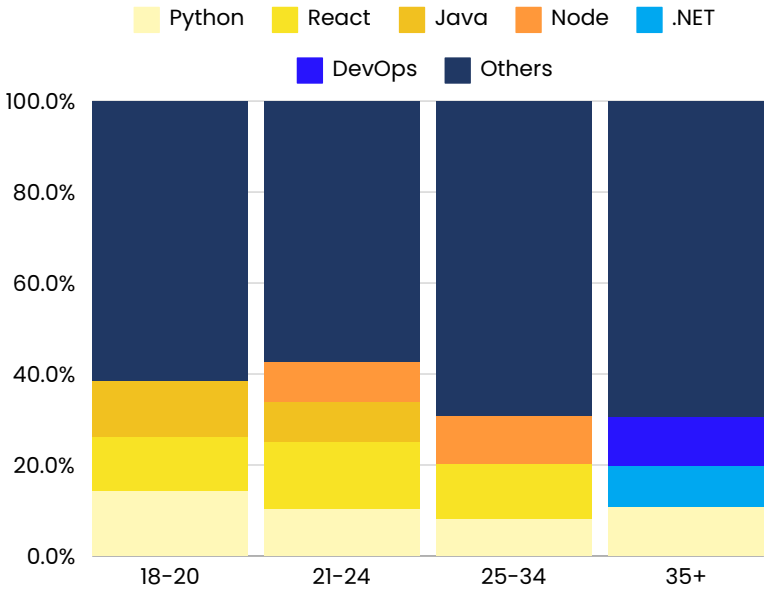
Stack usage differs across genders. The most popular languages among female software engineers are Python (10.8%), React (10.8%), and Java (9.7 %). Male engineers seem to prefer Node over Java with the top 3 languages being React (13.4%), Node (10.1%), and Python (10%).

Stack Choice by Gender



Python is consistently in the top 3 languages used by software engineers of all age groups. React ranks first or second among those aged 34 and younger and disappears from the top 3 in the 35+ age group. Java is widely used in the younger groups (18-24), probably linked to a large part of this group being undergraduate and graduate students. Node is present in force in the 21-34 age range but not in the 35+ group where DevOps and .NET make their appearance in the top 3 languages.

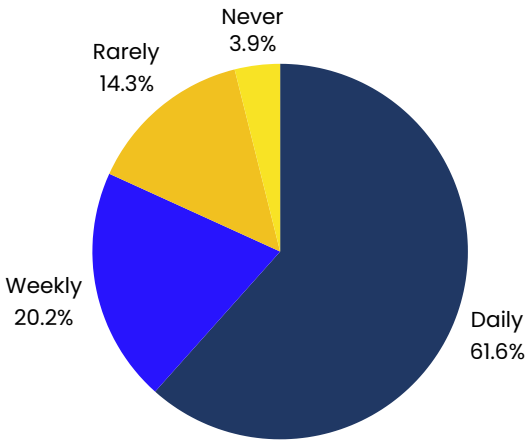
Stack Choice by Generation



AI-POWERED DEVELOPERS

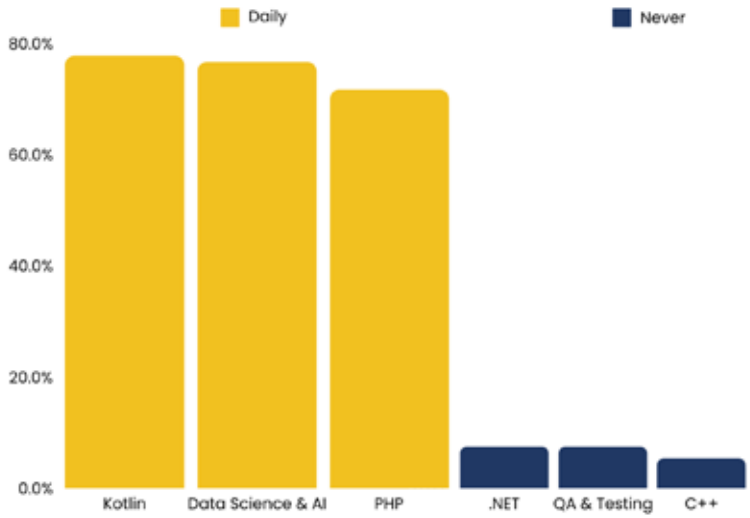
61.6% of software engineers in Lebanon use AI daily, 20.2% use it weekly, 14.3% rarely use it, and only 3.9% never use it. This means that 81.8% use AI regularly which indicates a massive adoption of AI technologies by Lebanese developers.

Frequency of AI Usage



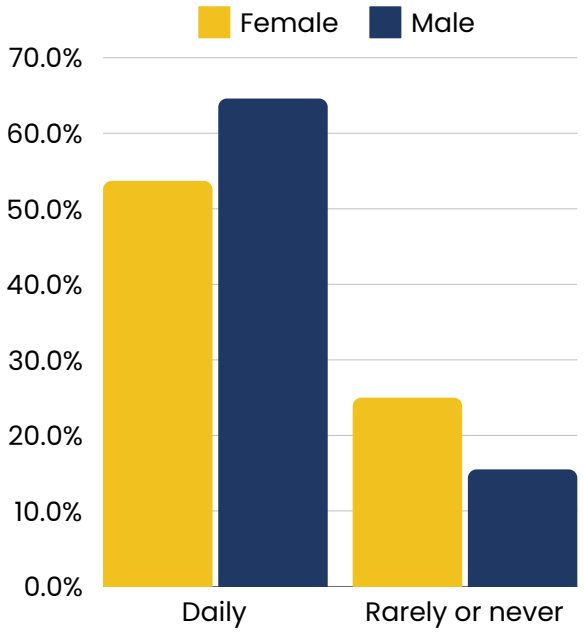
Software engineers who work with data science, Kotlin, and PHP technologies heavily rely on AI in their daily tasks, with percentages of 76.6%, 77.7%, and 71.6%, respectively. On the other hand, those utilizing .NET, C++, or working with QA & Testing use AI the least.

Highest and Lowest Usage of AI by Tech Stack



Male engineers show a higher inclination towards incorporating AI into their daily development tasks, with 64.6% using AI daily compared to 15.5% rarely or never using it. Female engineers use AI less, with only 53.7% using it daily and 25% rarely or never using it.

AI Usage Across Genders

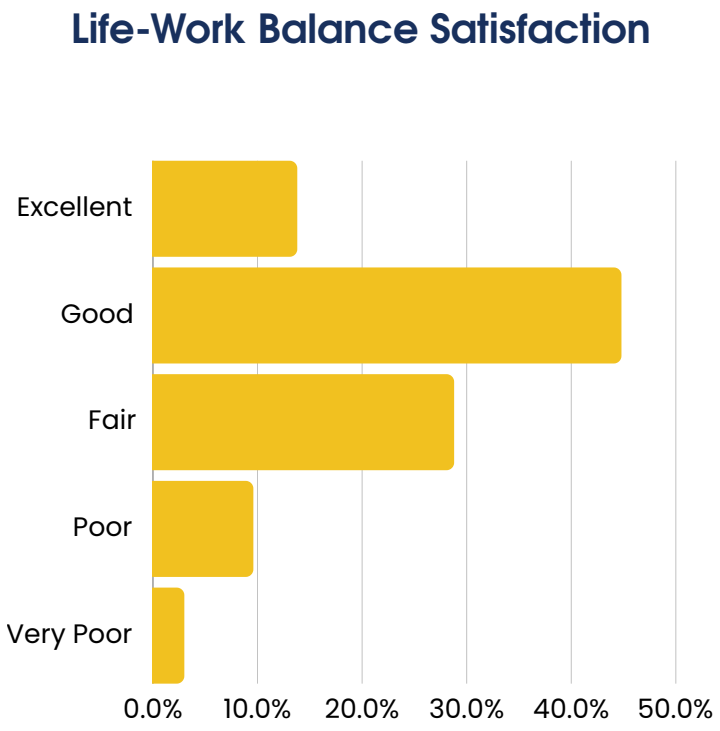


Developers aged 35 and above are the most frequent users of AI with 68.2% saying they use AI daily. The 18-20 age group seems to be the most active on the AI front as 88.7% of them use it on a daily or weekly basis, the highest percentage among all age groups.

BALANCING LIFE AND WORK

Most Lebanese software engineers positively rate their life-work balance, with 58.6% of them saying it's either good or excellent and only 12.6% saying it's poor or very poor. In a country in crisis, this figure could reflect the "eternal Lebanese optimism" or it could mean that developers enjoy a steady income in hard currency - well above the average salary of the general population.

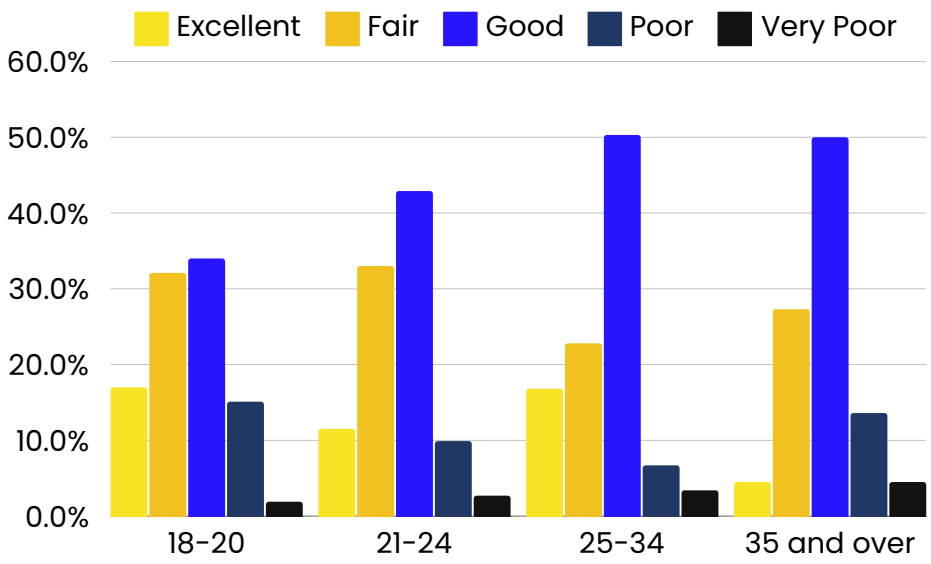
A disappointing figure is the percentage of women engineers experiencing a poor or very poor life-work balance, at 16.7%, well above their male counterparts (11.1%).



Software engineers aged 35 and above are those who said they experience the poorest life-work balance, with only 4.5% rating it as excellent and a staggering 18.2% rating it as poor or very poor.

On the contrary, 17% of the respondents in the 18-20 age group rate their life-work balance as excellent, the highest percentage across all age groups. However, an equal percentage in this young group rate their life-work balance as poor or very poor. This trend is not seen in any other age group.

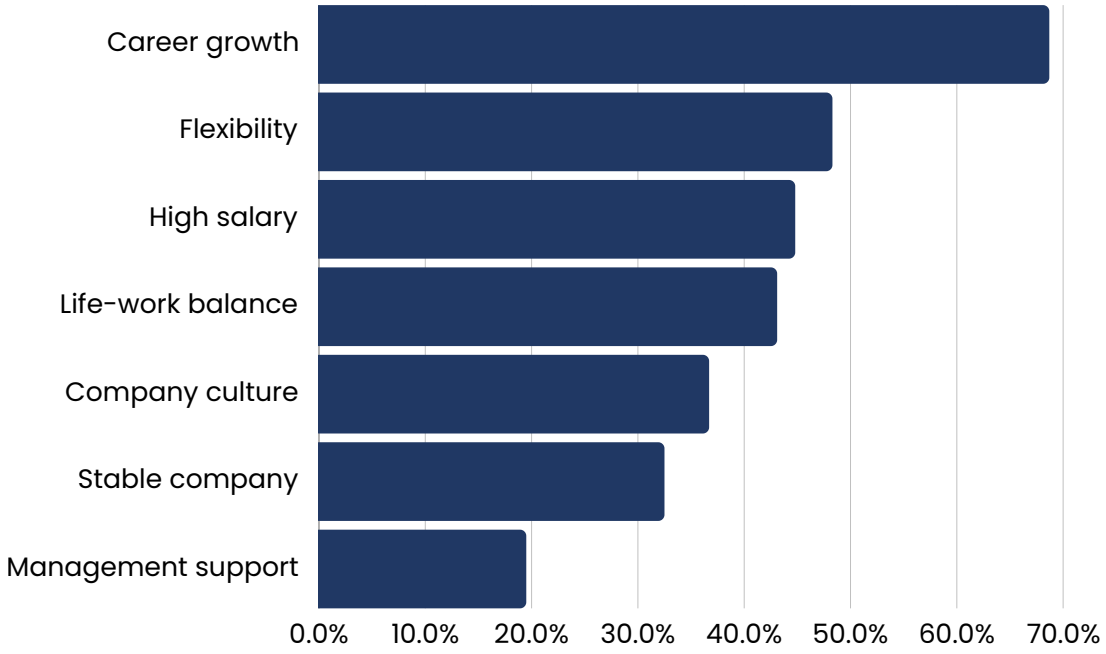
Life-Work Balance Satisfaction Across Age



RETENTION FACTORS REVEALED

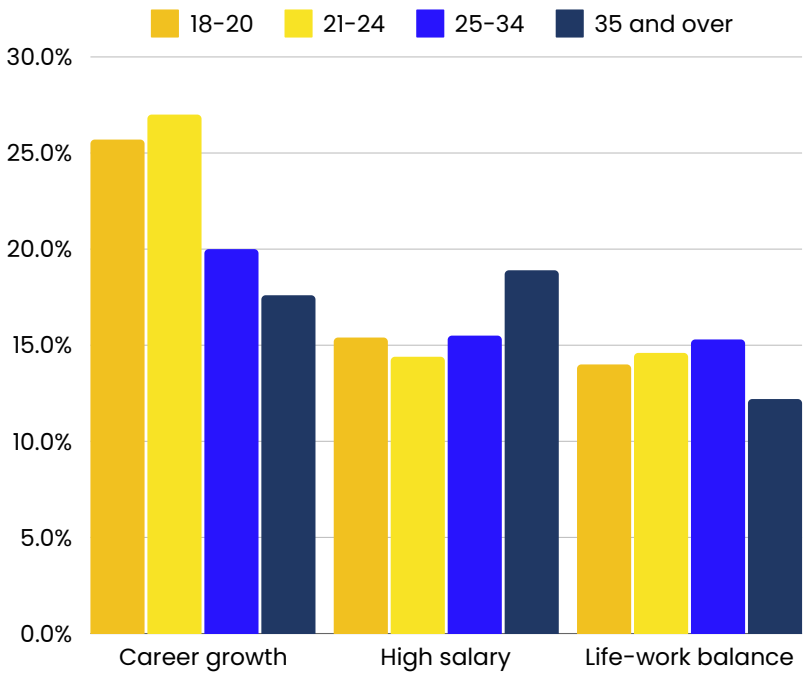
68.7% of respondents valued career advancement as their main reason for staying in their current job, followed by flexibility (48.3%), a high salary (44.8%), and a good life-work balance (43.1%). These findings indicate that talent retention is closely related to a clear career path, some sort of flexibility (location, hours, leaves, etc.), and a good compensation. The knowledge worker mindset seems to have evolved in Lebanon from the days where pay was the most attractive element when looking for new opportunities.

Factors Influencing Job Retention



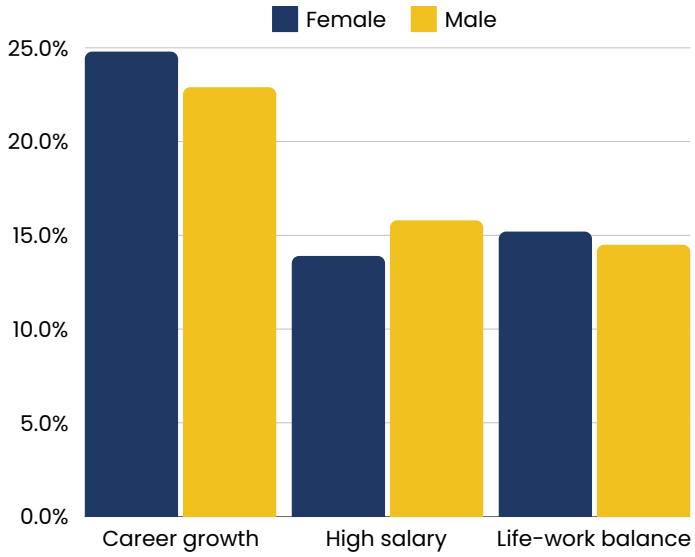
Software engineers aged 35 and above prioritize a high salary as the most crucial factor for remaining in their current job. Meanwhile, those in the 18-24 age group value career growth as their top priority for job retention.

Top Retention Drivers by Age Group



Retention factors are very similar for male and female engineers. Women place a slightly higher emphasis on career growth compared to men (24.8% vs. 22.9%), while men cite salary a little more than women (15.8% vs. 13.9%).

Key Job Retention Drivers for Male vs. Female



KEY TAKEAWAYS

This survey tried to answer some questions about Lebanon's software engineering workforce, and we believe it provided good insights into the local tech scene. The key takeaways are:

- Women represented 27% of respondents, a figure that is higher than the global percentage of women software engineers.

- 46% of respondents work remotely which is reassuring in terms of Lebanon's tech talent capability of serving clients abroad.

- React, Python, and Node are the top 3 programming languages used by software engineers in Lebanon.

- 82% of respondents use AI on a daily or weekly basis, indicating high adoption of AI by Lebanese software engineers.

- The vast majority of respondents (59%) rate their life-work balance as good or very good.

- Career advancement, flexibility, and a high salary are the top reasons software engineers in Lebanon stay in their current job.

APPENDIX: SURVEY METHODOLOGY

This survey was conducted online in July 2024 using SurveyMonkey, targeting software engineers in Lebanon. The questionnaire included seven multiple-choice questions listed below, some of which allowed multiple answers. A total of 406 respondents participated in the survey.

It's important to note that this survey was not designed to be a scientific study but rather to provide a snapshot of current trends within the tech community in Lebanon.

Survey questions:

What is your age?

- Under 18
- 20-18
- 21-24
- 25-34
- 35 and over

What is your gender?

- Male
- Female
- Prefer not to say

In which tech stack do you currently work? (choose all that apply)

- DevOps
- QA & Testing
- React
- Angular
- Vue
- Python
- Node
- .NET
- Java
- PHP
- C++
- Go
- Ruby
- Flutter
- React Native
- Swift
- Kotlin
- JavaScript (Vanilla)
- Data Science & AI
- Other (please specify)

What is your current work arrangement?

- Remote
- Hybrid
- On-site

How often do you use AI technologies in your work?

- Daily
- Weekly
- Rarely
- Never

What would be the most compelling reason(s) for you to stay in your current job? (choose all that apply)

- High salary
- Career growth
- Company culture
- Management support
- Life-work balance
- Flexibility
- Stable company

How would you rate your current life-work balance?

- Excellent
- Good
- Fair
- Poor
- Very Poor

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